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This study is divided into three phases -- a statistical method for allocating local property tax, obtained data and Correction Factors were computed for all cities of 50,000 or more (1960 census) and Correction Factors were applied to the apportionment of school funds in four selected states, Florida, Illinois, New York and California. Conclusions show that variation in the ratio of total population to public school attendance is sufficiently great to warrant consideration in the apportionment of public school funds, the correction factor suggested tends to provide relief primarily for large cities, and per capita costs of municipal services vary among cities in different population size groups, with higher per capita costs occuring in the larger cities. Also gives suggestions in the event specific legislative proposals incorporating the Correction Factor are developed. Numerous tables and charts, illustrating the findings, are contained in this study.

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A Local Tax Allocation Correction Factor for Use in Apportioning State School Funds

Cooperative Research Project No. 2123

Erick L. Lindman

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University of California, Los Angeles
Los Angeles, California
1964

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FOREWORD

This study is based upon a paper presented by the author to the Sixth National Conference on School Finance sponsored by the Committee on Educational Finance of the National Education Association. Originally the author proposed a three year study in which the Correction Factor would be applied, and its effects analyzed, in a dozen or more states. At the suggestion of representatives of the U.S. Office of Education a more limited pilot project was undertaken. The findings of this study are reported herein.

In the first phase of the study a statistical method for allocating local property tax resources between public schools and other local governmental services was developed. Using this method of allocating local property tax resources, a Correction Factor was derived for use in computing state support for local school systems under typical public school foundation programs. These formulas are derived in Chapter 1.

In the second phase of the study data were obtained and Correction Factors were computed for all cities of 50,000 or more population and for counties in selected states. Basic data for this purpose were obtained from the 1960 U.S. Census.

In the third phase of the study, Correction Factors were applied to the apportionment of school funds in four selected states: Florida, Illinois, New York and California. The purpose of these applications was to determine how much change would have occurred if the Correction Factor had been used in the apportionment of state school funds, and to assess the impact of these changes.

Analysis of the impact in Florida was made by Dr. R. L. Johns, Head, Department of Educational Administration, College of Education, University of Florida. The Illinois analysis was made by Dr. William P. McLure, Director, Bureau of Educational Research, University of Illinois. Dr. Arvid J. Burke, Director of Studies, New York Teachers' Association made the New York analysis. These analyses are reported in Chapters 2, 3, and 4 along with comments reflecting the independent judgments of each consultant.

Primary responsibility for analyzing the impact in California was assigned to Dr. Marvin C. Alkin, Assistant Professor of Education, UCLA, who assisted the author in the preparation of the final report.

Erick L. Lindman

A LOCAL TAX ALLOCATION FACTOR FOR USE IN THE APPORTIONMENT OF STATE SCHOOL FUNDS

CHAPTER I

THE PROBLEM

Local public school systems in the United States have been granted, in most cases, administrative and fiscal independence from other local governmental jurisdictions. Recent trends do not indicate a tendency to transform independent local school systems into "departments" of county or city governments. Indeed, if there is a trend, state control of local school systems is increasing, making them more like "departments" of state government and hence less eligible for merger with general municipal or county governments.

In recent years rising costs of municipal government and of city school systems in the wake of population changes occurring in metropolitan areas has increased awareness of the fact that public schools and city governments draw upon the same tax base. Resistance to increases in school tax rates often reflect a conviction among voters that the total property tax rate is too high rather than a conviction that public schools are adequately financed. Yet the approach to school finance in the United States assumes that school needs beyond a state guaranteed minimum should be judged by voters in local school districts in terms of proposed increases in property tax rates.

Since both local school taxes and ad valorem taxes for other local government are levied on the same property, this tax base is shared between schools and other local government in proportion to their respective tax rates. If the burden of local government is relatively light, the public school system in a sense, has available to it a greater share of the property tax base. On the other hand, if property tax rates for other local governmental services are excessive, a smaller share of the property tax base is available for public schools.

Differences in local property tax rates may reflect efficiency of management, unusual demands for certain types of governmental service, quality and unit cost of service, or amounts of taxable wealth per capita. These factors apply to both public schools and other local government. Efforts to allocate the local property tax base between public schools and other local government on the basis of tax rates actually levied by individual jurisdictions lead inevitably to interminable debate about relative efficiency and value of services performed by each local jurisdiction. While these disputes are sometimes resolved by local administrative bodies which have control over both public schools and other local government, such local resolution of the problem would be a little value in determining allocation of state school funds.

If an allocation of local property tax resources between schools and other local government is to be used in apportioning state school funds, the allocation must be applied uniformly throughout the state. This, of course, is done now in most states, by requiring local school systems to allocate the proceeds of a prescribed local property tax rate to finance the local contribution to a prescribed state minimum (or foundation) school program. The state contributes the difference between "the need" and "local funds available" by an "equalization" payment.

This procedure assumes that taxpayers in each local school system should be expected to contribute the same property tax rate to finance the state minimum school program, irrespective of the tax rate required for other local governmental services. Although soundness of this assumption has been the subject of much discussion, one aspect of the issue has escaped attention and is the central concern of this report.

A city which has a high property tax base in relation to public school enrollment will, in most cases, have a relatively high property tax base for local governmental services. Thus, a community which is in a favorable position to finance its public schools will usually be in a favorable position to finance municipal services. But notable exceptions exist. Consider two city school systems, A and B, which have the following characteristics:

		City A	City B
1.	Number of children attending public schools.	100,000	100,000
2.	Total population	800,000	400,000
3.	Assessed valuation of taxable property.	$1,000,000,000	$1,000,000,000
4.	Assessed valuation per pupil	$10,000	$10,000
5.	Assessed valuation per capita.	$1,250	$2,500

Since both of the hypothetical cities have the same number of public school children and the same total assessed valuation of taxable property, under present school support theory it is presumed that both have the same capacity to provide for school needs from local property tax sources. In both cases the assessed valuation per public school child is $10,000.

But, do these two cities have the same relative capacity to finance local governmental services? If the cost of local government is proportional to the total population rather than to the number of children attending public schools, then City A, with double the total population of City B, will be required to levy a higher tax rate for municipal services. To provide the same per capita amount for local governmental services from the property tax sources, City A will be required to levy a property tax rate twice as great as the rate required in City B.

Under these conditions, City A's higher non-school tax rate may encroach upon the property tax base to the extent that it is less able to support its public school program. This conclusion holds even if both cities expend from property tax sources, the same per capita amount for municipal services. In this situation City A's greater tax rate for local governmental services is not due to extravagance or inefficiency, but due to the fact that services must be provided for a much larger number of people.

The allocation of the local property tax base between the state school foundation program and other local governmental services can be based upon two distinctly different principles. The legislature may declare, as it has implicitly in most states, that each community is expected to allocate the same per cent of its property tax base to public schools. Under this principle, the hypothetical cities A and B are presumed to be equally able to finance public schools from local property tax sources and the state, accordingly apportions the same amount to each city school system.

On the other hand the legislature may recognize the double burden upon the local property tax base and expect City A, with its greater total population, to devote a larger portion of its local property tax base to municipal services and have available a correspondingly smaller portion for public schools. To focus attention more sharply upon the issue, a formula for apportioning of state school funds based upon the second principle is derived and applied in selected states.

Derivation of the Local Tax Allocation Correction Factor

In developing a foundation or incentive program for public school support incorporating the principle of equalization, it is necessary to determine the amount of funds local school districts can raise by exerting "equal local effort." Since local school funds are usually derived from property taxation "equal local effort" means in most cases "equal local property tax effort."

The commonly used definition of "equal local property tax effort" may be stated as follows: Two school districts exert equal effort to support public schools from local property tax sources if their property tax rates for schools are equal. It is, of course, assumed that the valuation of property for tax purposes has been determined by accurate application of uniform standards in both districts.

This definition of "equal effort" ignores other burdens upon the local property taxpayer and assumes that the property tax base is equally available for school purposes in all school districts even though in some of these districts greater non-school property tax rates are needed to provide other local government services.

A second definition of "equal local property tax effort" which considers the total tax burden for all local purposes may be stated as follows: Two school districts exert equal effort to support schools from property tax sources if the total local property tax rates for all purposes in the two districts are equal, and if the allocation of the proceeds of these taxes to public schools and to non-school local services are proportional, respectively, to public school attendance, and to total population.

It will be apparent to the reader that the two definitions of equal effort are equivalent if the ratios between total population and public school attendance are equal in the two districts. But if these ratios are unequal, different local school property tax rates in the two districts would represent equal effort under the second definition.

In order to facilitate analysis of the relationships between these two definitions and their application in state school support programs, the following notation is used:

N = Population of a school district.

ΣN = State total population.

A = Public school attendance (ADA or ADM) in a school district.

ΣA = State total public school attendance.

V = Total equalized assessed valuation of taxable property in a school district.

ΣV = State total of equalized assessed valuation of taxable property in all school districts.

R = Property tax rate levied by a school district.

$\overline{R}$ = State average property tax rate levied by school districts, $\Sigma(RV)/(\Sigma V)$.

R_f = Tax rate prescribed by the state to determine the local share of the state school foundation program.

C_f = Cost per pupil used to compute the amount included in the state school minimum or foundation program for each district.

G = Actual local property tax rate for non-school purposes levied on the property in a school district.

$\bar{G}$ = State average property tax rate levied locally for non-school purposes. $\Sigma(GV)/(\Sigma V)$.

In this notation, capital letters without subscripts represent variables, that is, quantities which vary from district to district; those with subscripts represent constants such as state totals or a prescribed tax rate.

Using this notation the formula for the tax rate in a local school district which represents "effort" equal to the state average is:

(I) $R = (\bar{R} + \bar{G})KA/(KA + N) = K(\bar{R} + \bar{G})/(K + N/A)$

in which K is a constant whose value must be ascertained. It will be noted that the quantity $(\bar{R} + \bar{G})$ is the state average local property tax rate for all purposes and the fraction $KA/(KA + N)$ is the portion of this tax to be allocated to public schools under the second definition of equal effort. In a school district in which the ratio of total population to public school attendance is equal to the state average (N/A equals $\Sigma N/\Sigma A$) the school district property tax rate representing state average effort would be the state average local school district tax rate. Substituting this relationship, (I) becomes:

(II) $\bar{R} = (\bar{R} + \bar{G})K/(K + \Sigma N/\Sigma A)$

from which the value of K is:

(III) $K = (\bar{R}/\bar{G})(\Sigma N/\Sigma A)$

Thus, K can be ascertained for any state by multiplying the ratio of total population to public school attendance for that state by the ratio of the average local school property tax rate to the average local non-school property tax rate. Using this formula, a different value of K would be obtained for each state, but within any state K is constant.

This value of K may be interpreted as the ratio of "weightings" that are applied to public school attendance (A) and to total population (N) in the allocation of the local property tax base between schools and other local governmental services. In this interpretation, the local property tax base is divided statistically into two shares:

Public school share = $(W_1A)/(W_1A + W_2N)$
Other local government share = $(W_2N)/(W_1A + W_2N)$

If W_1 is made equal to the state average amount per pupil raised from local property tax sources for public school purposes and if W_2 is made equal to the state average amount per capita raised from local property tax sources for other local governmental purposes, they may be represented in the notation used in this study as follows:

$$W_1 = (\overline{R}\Sigma V)/(\Sigma A)$$
$$W_2 = (\overline{G}\Sigma V)/(\Sigma N)$$
$$W_1/W_2 = (\overline{R}/\overline{G})(\Sigma N/\Sigma A)$$

which is the value of K determined above.

In this analysis, we are not interested in determining the formula for state average "effort" under the second definition. Instead, we are interested in applying this definition of "effort" in existing state schools support formulas. In many states the amount of state support contributed to a school district is the difference between a measure of need or load for that district expressed in dollars, and a local contribution based upon the ability of the school district to raise funds from local tax sources. The local contribution is intended to require "equal property tax effort" for all school districts in the state. Often this contribution is a product of a state prescribed tax rate, and the equalized valuation of all taxable property in the school district.

This formula for the apportionment of state school funds among local districts is variously referred to as "equalization," "minimum program" or "foundation program" and may be represented by the following formula:

(IV) state aid = $C_fA - R_fV$

in which C_f is a guaranteed amount of funds per pupil. The expression C_fA represents the cost of the foundation program and the expression R_fV, in which R_f is a prescribed tax rate uniformly applied in all school districts, represents the local contribution to the state school minimum or foundation program.

This method of determining the local contribution to the foundation program is based upon the first definition of equal effort. In order to apply the second definition, this product must be multiplied by a local tax allocation "Correction Factor" (CF) which is in the form:

$$\text{(V)} \quad CF = (K'KA)/(KA + N)$$

The value of K has already been established. A value for K' is needed to establish the condition that the Correction Factor shall not change the present local contribution requirement for a school district in which the ratio of population to public school attendance is equal to the state average (N/A equals $\Sigma N/\Sigma A$). This is accomplished if K' is equal to:

$$\text{(VI)} \quad K' = (K\Sigma A + \Sigma N)/(K\Sigma A)$$

Substituting this value for K' and the value for K shown in (III) the Correction Factor becomes:

$$\text{(VII)} \quad CF = \frac{\overline{R}/\overline{G} + 1}{\overline{R}/\overline{G} + (N/A)(\Sigma A/\Sigma N)}$$

This is the general formula for the Correction Factor. In this study, to simplify initial application, it has been assumed that one half of the local property tax base is normally available for school purposes. Under this assumption $\overline{R}$ equals $\overline{G}$ and (VII) becomes:

$$\text{(VIII)} \quad CF = (2A/\Sigma A)/(A/\Sigma A + N/\Sigma N)$$

or

$$\text{(IX)} \quad CF = \frac{2}{1 + (N/A)\,(\Sigma A/\Sigma N)}$$

which is the Correction Factor used in this study. In applying this correction to state school support formulas, the local contribution (R_rV) is multiplied by a correction factor computed for each district in accordance with

Formula IX. It will be noted that the value of only one variable, the ratio of total population to public school attendance, is required to compute the Correction Factor for each district in a state.

Characteristics of the Local Tax Allocation Correction Factor

In both the general form of the Correction Factor (Formula VII) and the special form used in this study (Formula IX), the expression N/A divided by $\Sigma N/\Sigma A$ appears in the denominator. Except in very unusual cases, this quotient has values ranging from .5 to 2.0. With this in mind, the effect upon the Correction Factor of changes in the relation of $\overline{R}$ to $\overline{G}$ is apparent. If non-property tax revenues replace property taxes for financing municipal services, the value of $\overline{G}$ will decrease in relation to $\overline{R}$. This change would cause Correction Factors computed from Formula VII to be closer to one and hence have less effect upon the apportionment of school funds. If $\overline{G}$ were permitted to approach zero (that is, if all local property tax revenues were allocated to schools) then the values of all Correction Factors computed from Formula VII would approach one. Under these conditions the Correction Factors would have no effect upon the school support formula, reflecting the fact that there would be no double burden upon the property tax.

In order to simplify initial application of the Correction Factor in this study it is assumed that, for the state as a whole, one half of all local property tax revenues are devoted to public schools and one half to other purposes. Under this assumption, $\overline{R}$ equals $\overline{G}$ and Formula IX is used to make all computations of local tax allocation Correction Factors. This assumption is reasonable for most states and provides satisfactory estimates for the purposes of this study. However, if specific legislation is developed for an individual state, Formula VII should be used.

In deriving the Correction Factor formulas, equal "cost weightings" per capita were used for all cities in a state. On the basis of reported per capita costs of municipal services by cities in different population-size classes, a case could be made for using greater per capita cost weightings for the larger cities. For example during the 1961 calendar year per capita cost of police protection varied from $6.97 in U.S. cities of less than 25,000 population to $22.48 in cities of 1,000,000 or more population. Simiilar, but less consistent, tendencies occur for other municipal services. A summary of per capita costs of selected municipal services is shown in Table I.

A study by Harvey Brazer[1] adds considerable weight to the evidence already presented. He points to the higher population density, lower incomes and a greater concentration of the aged as factors which increase the level of municipal expenditures in central cities. Brazer examined various per capita expenditures of local governments in the 17 central cities of the 12 largest metropolitan areas and of the areas outside of these cities. From Brazer's data the mean per capita expenditure has been computed for several of the separate major functions of government. The derived data is presented below:

	Highways	Welfare	Police and Fire Protection	All Other General Expenses
Central City	$19	$19	$28	$94
Outside Central City	$16	$12	$13	$52

Since in this study equal per capita "cost weightings" for non-school local public services have been used, increases in state school support called for by the Correction Factor for most large cities probably understates their case.

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[1] Harvey E. Brazer, Some Fiscal Implications of Metropolitanism, Washington, D.C.: Brookings Institution, Reprint No. 61, 1962, pp. 71-72.

It can, of course, be argued that the greater per capita expenditure in the larger cities reflects more complete municipal services and that corresponding services must be provided privately in the smaller cities and rural areas. However, it cannot be assumed that the public services received by city residents is in direct proportion to the larger municipal expenditure; neither can it be assumed that the larger expenditure is strictly determined by an economic choice on the part of the resident population. The fact that central cities may be required to provide more municipal services than smaller communities is in part determined by the behavior of the suburban areas in looking to the central city for various governmental functions. Hawley[2] found that there is a close association between the per capita expenditures of the central city and the proportion of the metropolitan population that lies outside of the central city. Margolis's study[3] of tax rates in the San Francisco-Oakland area would support the notion that the number of persons for whom the city must provide services is to some extent a function of the nonresident contact population and their municipal service requirements.

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[2] Amos Hawley, "Metropolitan Government and Municipal Government Expenditures in Central Cities," Journal of Social Issues, Vol. 7, 1951, pp. 100-108.

[3] Julius Margolis, "Municipal Fiscal Structure in a Metropolitan Region," The Journal of Political Economy, Vol. 65, 1957, p. 232.

TABLE 1

Per Capita Expenditures For Municipal Services by Population-Size Classes of Cities, 1961

Population Size Class 1	General Expend. Excluding Capt. Out. 2	Police Protection 3	Fire Protection 4	Capital Outlays 5
1,000,000 Or More	$160.65	$22.48	$10.51	$45.02
500,000 - 999,999	120.03	17.33	11.45	35.90
300,000 - 499,999	86.71	12.83	10.73	31.82
200,000 - 299,999	89.31	12.73	10.55	33.49
100,000 - 199,999	89.59	11.33	10.60	25.73
50,000 - 99,999	83.89	10.49	9.71	23.76
25,000 - 49,999	66.75	8.84	8.22	21.44
Less Than 25,000	46.80	6.97	3.99	12.75

Source: Compendium of City Government Finances in 1961, U.S. Department of Commerce, Bureau of Census, Washington, 1962 (Table 4, page 9).

Application of the Correction Factor in Selected States

Application of the Correction Factor to existing state school support programs presents several difficulties. In most states school districts are not coterminous with cities or counties. Total population data is usually available for cities and counties but public school attendance data is available only for school districts. Seldom are both public school attendance and total population data currently available for the same local jurisdictional areas.

The 1960 United States Census includes both total population and resident public school enrollment data for cities of 10,000 or more population, for counties and for each state, but not for school districts. From these data it is possible to compute the ratio of total population to public school enrollment (N/A) for any county or city and for the entire state ($\Sigma N/\Sigma A$). From these data the Correction Factors were computed for counties in several states and for all U.S. cities of 50,000 or more population.

After reviewing the computations for several states, four were selected for study--Florida, Illinois, New York and California. Each of these states apportions most of its state school funds in accordance with an equalization formula to which the Correction Factor could be applied. In Florida all school districts are coterminous with counties. The other three states have some very large and some small school districts few of which are coterminous with counties or cities. For these three states it was assumed that the Correction Factor computed for a city of 50,000 or more population from U.S. census data would be sufficiently descriptive of the school district associated with it. Computations were not made for small towns or unincorporated areas.

The following four chapters include reports of the application of the Correction Factor to the apportionment of state school funds in these four states, along with comments by the consultant who analyzed the effects in each state.

CHAPTER II

APPLICATION OF THE CORRECTION FACTOR TO APPORTIONMENT OF SCHOOL FUNDS IN FLORIDA

with comments by R. L. Johns

Florida is a state with only sixty-seven school districts, each coterminous with the county. Therefore, Florida is an appropriate state to select for examining the practicability of applying the suggested Correction Factor to jurisdictions where school district boundaries are not coterminous with municipal boundaries.

The computation of the Correction Factor for Florida county school districts is presented in Table II. The Correction Factor is applied to Florida data in Table IIIA and IIIB. The relationship between gains or losses in state funds resulting from the application of the Correction Factor, and the per cent of the population in each county district living in incorporated places of 1,000 or more is analyzed in Table IV.

The Florida formula for state support is similar in principle to the general formula: State support equals $C_f A - R_f V$ but differs in some details. The cost of the guaranteed foundation program is calculated in terms of weighted teacher units and transportation units instead of pupil units but this causes no difficulty in applying the Correction Factor.

The total required local effort in Florida under its present formula is determined by multiplying 25 per cent times the total cost of the foundation program; the required local effort of each district is determined by multiplying its per cent of the total taxpaying ability of the state (as determined by an economic index of taxpaying ability) times the total effort required of all districts. The economic index was designed to estimate each county's per cent of the total equalized value of non-tax exempt property in the state. This index is used because no state agency is available for determining the equalized value of property in the state. Since each county's per cent of the total taxpaying ability as determined by an index is assumed to be equivalent to its per cent of the equalized value of the state, the Correction Factor can be multiplied by each county's per cent of the taxpaying ability of the state instead of its equalized value. This is done in Table III-A. These multiplications result in the indexes totaling less than 100. They are then scaled upward so that they will total 100 and the result is an adjusted index that incorporates the local tax Correction Factor. The local effort by the adjusted index is computed in Table III-A and compared in Table III-B with the effort required by the unadjusted index assuming that the same amount of state funds would have been distributed.

Actually Florida used a different method in 1960 in determining the total effort required of all districts than the method used in 1964; but this change has no effect on the application of the Correction Factor to Florida data.

Following are two summary tables showing certain data for the five counties having the highest values for the Correction Factor and the five counties having the lowest values. These data are abstracted from Tables II, III-A, III-B, and IV. In studying these tables it should be borne in mind that the counties with high Correction Factors would have a loss in state funds and those with a low factor would have a gain, assuming that the total state funds distributed remained constant.

FIVE COUNTIES WITH THE HIGHEST CORRECTION FACTORS

COUNTY	CORRECTION FACTOR	RATIO OF POPULA. TO PUBLIC SCH. ENROLLMENT	% OF TOTAL K-12 ENROLLM. IN PUBLIC SCHOOLS	% OF POPULA. LIVING IN INCORPOR. PLACES OF 1,000 AND ABOVE	LOSS IN STATE FUNDS PER PUPIL	LOSS IN STATE FUNDS PER INHABITANT OF INCORPORATED PLACES 1,000 AND ABOVE
Washington	1.22	3.25	100	28.1	$4.02	$4.40
Madison	1.20	3.44	100	32.2	5.22	4.72
Calhoun	1.20	3.44	100	32.0	3.81	3.47
Jackson	1.19	3.48	99	35.0	4.58	4.39
Hamilton	1.19	3.51	100	27.3	5.20	5.43

FIVE COUNTIES WITH THE LOWEST CORRECTION FACTORS

COUNTY	CORRECTION FACTOR	RATIO OF POPULA. TO PUBLIC SCH. ENROLLMENT	% OF TOTAL K-12 ENROLLM. IN PUBLIC SCHOOLS	% OF POPULA. LIVING IN INCORPOR. PLACES OF 1,000 AND ABOVE	GAIN IN STATE FUNDS PER PUPIL	GAIN IN STATE FUNDS PER INHABITANT OF INCORPORATED PLACES 1,000 AND ABOVE
Pinellas	.85	6.91	92	73.2	$7.10	$1.40
Monroe	.89	6.40	87	70.9	3.42	.75
Charlotte	.90	6.31	98	25.1	3.48	2.20
Sarasota	.90	6.23	90	48.8	4.76	1.56
Collier	.92	6.00	83	29.5	4.00	2.26

The five counties with the highest Correction Factors are all rural counties located in North Florida. Their principal occupation is farming. These counties are not resort counties and therefore do not attract retired people from other sections of the nation. As is typical of farm areas, these counties all have a large number of pupils in proportion to the total population.

The five counties with the lowest Correction Factors are all resort counties located in South Florida. The principal occupations in all these counties are related to the tourist industry, and each attracts large numbers of retired people from other sections of the nation who become permanent residents. This results in a low per cent of school children in relation to the total population, a pattern which is typical of counties containing a large number of retired people.

The purpose of the Correction Factor is to modify the taxpaying ability of a district so that due allowance is made for the effect of the extra costs of municipal government on local taxpaying ability for schools. It will be noted that the five counties with the lowest Correction Factor vary greatly in per cent of population living in incorporated places. The range is from 25.1 per cent in Charlotte County to 73.2 per cent in Pinellas. It will be noted that the greatest increase in state funds per inhabitant would be received by Charlotte and Collier Counties which have a low per cent of inhabitants living in municipalities. On the other hand, of these five counties, Pinellas and Monroe would receive the least gain per inhabitant in state funds, but they are the two most urban counties of this group. One is led to suspect that the Correction Factor operates more in Florida to provide increased funds for the counties with a large retired population or private school attendance than it does to provide additional funds because of additional municipal costs. This is due to the fact that the boundaries of school districts in Florida are not coterminous with municipalities and benefits of the Correction Factor accrue equally to urban residents who pay city property taxes and to other residents of the county.

If the entire State of Florida were incorporated into municipalities and municipal services provided, then the boundaries of school districts would be coterminous with municipal boundaries and the presence of retired people and non-public school pupils would have no unintended effect on the population Correction Factor. Since this is not likely to occur in the near future, the application of the Correction Factor in its present mathematical form would probably create more inequities than it would correct. This analysis of the Florida data suggests that the application of the Correction Factor to any school district in any state where the district boundaries are not coterminous or almost coterminous with municipal boundaries is likely to result in some undesired effects. For example, in Florida all local school taxes are levied county wide but municipal taxes are levied on incorporated territory only. If a county received additional state funds because of the application of the Correction Factor, those benefits would accrue to persons living in unincorporated territory with no municipal costs, in the same proportion as they would accrue to persons living in incorporated territory with municipal costs.

It will be noted from Table III-B that the application of the Correction Factor reduces the state funds apportioned to Gilchrist County $6.85 per pupil and to Suwannee County $5.69. These are greater losses per pupil than any of the five counties with the lowest Correction Factors. This is due to the fact that the gain or loss in state funds per pupil is affected both by the Correction Factor and the equalized value per pupil. This is demonstrated in the following two summary tables.

THE FIVE COUNTIES WITH THE HIGHEST POPULATION CORRECTION FACTORS ARRANGED IN ORDER OF EQUALIZED VALUATION PER PUPIL

COUNTY	EQUALIZED VALUATION PER PUPIL	LOSS IN STATE FUNDS PER PUPIL	POPULATION CORRECTION FACTOR
Hamilton	$4,555	$5.20	1.19
Madison	4,350	5.22	1.20
Jackson	4,011	4.58	1.19
Calhoun	3,181	3.81	1.20
Washington	3,054	4.02	1.22

THE FIVE COUNTIES WITH THE LOWEST POPULATION CORRECTION FACTORS ARRANGED IN ORDER OF EQUALIZED VALUATION PER PUPIL

COUNTY	EQUALIZED VALUATION PER PUPIL	GAIN IN STATE FUNDS PER PUPIL	POPULATION CORRECTION FACTOR
Collier	$9,625	$4.00	.92
Sarasota	9,061	4.76	.90
Pinellas	8,742	7.10	.85
Charlotte	6,611	3.48	.90
Monroe	5,868	3.42	.89

Attention is directed to the fact that among the five counties with the highest Correction Factors, the counties with the highest equalized values per pupil have the greatest loss per pupil. For example, both Hamilton and Jackson have a Correction Factor of 1.19. However, Hamilton has an equalized valuation of $4,555 per pupil and Jackson $4,011. Hamilton would receive a loss in state funds of $5.20 per pupil and Jackson $4.58.

However, among the five counties with the lowest Correction Factors, the counties with the highest valuation per pupil would receive the greatest gain per pupil in state funds. For example, both Sarasota and Charlotte counties have local tax Correction Factors of .90. But Sarasota has an equalized valuation of $9,061 per pupil and it would receive an increase of $4.76 per pupil in state funds. Charlotte County with an equalized valuation of $6,611 would receive an increase in state funds of $3.48 per pupil.

That part of the variations in gains and losses in state funds per pupil which is caused by variations in equalized value per pupil might be considered by some as an undesirable property of the formula. However, if one accepts the assumptions underlying Formula IX of Chapter I, this is not an undesirable characteristic. If school costs are proportional to school population, and municipal costs proportional to municipal population, and if the residual local taxpaying ability is shared equally by the school district and the municipality, then in any district where the Correction Factor is greater or less than one, the local taxpaying ability has in reality been reallocated between the municipality and the school district. The reallocation is recognized in the Correction Factor. Since the purpose of the factor is to correct the equalized valuation of school districts proportionately, the fact that per pupil gain or loss in computed local taxpaying ability may not be the same in districts with the same Correction Factor, should not be considered as an objectionable feature of the formula.

In conclusion, it will be difficult to apply any type of correction factor to the state aid formulas to make allowance for the extra costs of municipal government in states such as Florida where school district boundaries are not coterminous with municipal boundaries. Assuming that an equitable adjustment factor could be developed, how could it be applied so that the taxpayers in unincorporated areas would not receive undeserved tax benefits? Even if deserved benefits could be passed on to municipalities, what assurance could be given that the taxpayers would act any more favorably on school tax rates? Is the purpose of the Correction Factor to substitute state revenue for part of the local property tax revenue for schools in municipal districts in order that the municipalities may make greater use of the property tax? Or is the purpose of the Correction Factor to keep within reasonable bounds the total property tax rate for schools and municipalities? Is the greater use of non-property taxes for municipalities from both state and local sources a better plan to accomplish the purpose of the Correction Factor?

In Florida, the State provides the cities with a substantial amount of non-property tax shared revenue. The cities also raise a considerable amount of local non-property tax revenue. The public schools of Florida at the present time (1963-64) receive approximately 55 per cent of their revenue from state sources, 41 per cent from local sources and 4 per cent from the federal government. All local taxes for schools are derived from property. Property taxes in Florida are relatively low for both schools and municipal government.

The problem of local school support in Florida is not one of high property taxes or competition of the schools with municipal governments for the local property tax. The problem in many school districts is the lack of initiative on the part of the people to vote the taxes they have the ability to pay. Therefore, local school support in Florida could probably be improved more by incorporating some type of financial incentive factor in the state plan than by incorporating a Correction Factor for the extra costs of municipal government. Assuming that it would be possible to develop an equitable correction factor for municipal costs in Florida districts, such a factor should not be incorporated in the state formula without at the same time incorporating a financial incentive factor. Unless this is done, the schools would not likely receive any benefit from including the local tax allocation Correction Factor in the formula.

TABLE II

Computation of Correction Factor For Florida Counties

County 1	Population 1960 2	Total Public School Enrol. 1960 3	Ratio Pop. To Pub. School Enrollment 4	% Of Total K-12 Enrol. In Pub. Sch. 5	Correction Factor 6
Alachua	75,304	16,311	4.62	99%	1.05
Baker	7,363	1,878	3.92	99	1.13
Bay	67,131	15,160	4.43	97	1.07
Bradford	12,446	3,272	3.80	99	1.15
Brevard	111,435	22,461	4.96	91	1.02
Broward	333,946	61,211	5.46	89	.97
Calhoun	7,422	2,160	3.44	100	1.20
Charlotte	12,594	1,995	6.31	98	.90
Citrus	9,268	2,060	4.50	100	1.06
Clay	19,535	4,246	4.60	96	1.05
Collier	15,753	2,626	6.00	83	.92
Columbia	20,077	5,259	3.82	99	1.15
Dade	935,047	162,492	5.75	88	.94
De Soto	11,683	2,171	5.38	99	.98
Dixie	4,479	1,155	3.88	100	1.14
Duval	455,411	96,648	4.71	93	1.04
Escambia	173,829	38,236	4.55	90	1.06
Flagler	4,566	915	4.99	99	1.01
Franklin	6,576	1,474	4.46	97	1.07
Gadsen	41,989	9,948	4.22	99	1.10
Gilchrist	2,868	778	3.69	100	1.16
Glades	2,950	671	4.40	100	1.08
Gulf	9,937	2,646	3.76	99	1.15

TABLE II
(Page Two)

County 1	Population 1960 2	Total Public School Enrol. 1960 3	Ratio Pop. To Pub. School Enrollment 4	% Of Total K-12 Enrol. In Pub. Sch. 5	Correction Factor 6
Hamilton	7,705	2,196	3.51	100%	1.19
Hardee	12,370	2,786	4.44	100	1.07
Hendry	8,119	1,807	4.49	100	1.07
Hernando	11,205	2,300	4.87	99	1.03
Highlands	21,338	4,603	4.64	98	1.05
Hillsborough	397,788	78,180	5.09	92	1.00
Holmes	10,844	2,959	3.66	100	1.17
Indian River	25,309	5,089	4.97	95	1.02
Jackson	36,208	10,399	3.48	99	1.19
Jefferson	9,543	2,457	3.88	100	1.14
Lafayette	2,889	732	3.95	100	1.13
Lake	57,383	11,592	4.95	98	1.02
Lee	54,539	10,645	5.12	94	1.00
Leon	74,225	16,018	4.63	97	1.05
Levy	10,364	2,549	4.07	100	1.11
Liberty	3,138	833	3.77	100	1.15
Madison	14,154	4,117	3.44	100	1.20
Manatee	69,168	13,113	5.27	97	.99
Marion	51,616	12,344	4.18	97	1.10
Martin	16,932	3,123	5.42	93	.97
Monroe	47,921	7,482	6.40	87	.89
Nassau	17,189	4,417	3.89	98	1.14
Okaloosa	61,175	13,143	4.65	94	1.05
Okeechobee	6,424	1,772	3.63	98	1.17

TABLE II
(Page Three)

County 1	Population 1960 2	Total Public School Enrol. 1960 3	Ratio Pop. To Pub. School Enrollment 4	% Of Total K-12 Enrol. In Pub. Sch. 5	Correction Factor 6
Orange	263,538	52,720	4.00	92%	1.01
Osceola	19,029	3,600	5.29	98	.98
Palm Beach	228,106	40,505	5.63	89	.95
Pasco	36,785	6,974	5.27	96	.99
Pinellas	374,665	54,248	6.91	92	.85
Polk	195,139	42,978	4.54	97	1.06
Putnam	32,212	7,907	4.07	99	1.11
St. Johns	30,034	6,445	4.66	86	1.05
St. Lucie	39,294	8,427	4.66	91	1.05
Santa Rosa	29,547	6,440	4.59	96	1.05
Sarasota	76,895	12,345	6.23	90	.90
Seminole	54,947	11,726	4.69	91	1.04
Sumter	11,869	2,878	4.12	100	1.11
Suwanne	14,961	4,032	3.71	100	1.16
Taylor	13,168	3,413	3.86	99	1.14
Union	6,043	1,175	5.14	100	1.00
Volusia	125,319	22,302	5.62	94	.95
Wakulla	5,257	1,461	3.60	100	1.17
Walton	15,576	4,398	3.54	99	1.18
Washington	11,249	3,462	3.25	100	1.22
STATE TOTAL	4,952,788	967,867	5.12	92	1.00

Source: Columns 2, 3, and 5 derived from United States Census of Population, 1960 Florida: PC(1) 11C, Tables 70, 82 and 83. Column 6 computed from Column 4, as explained in text.

TABLE III-A (Columns 1-6)

Impact Of Correction Factor Upon

The Apportionment Of School Funds In Florida, 1959-60

COUNTY	CORRECTION FACTOR 1959-60 Col. 1	INDEX OF TAXPAYING ABILITY 1959-60 Col. 2	COL. 1 X COL. 2 Col. 3	ADJUSTED INDEX (Col. 3 X 1.00875) Col. 4	LOCAL TAX EFFORT BY ADJUSTED INDEX (Col. 4 X $38,315,774) Col. 5	LOCAL TAX EFFORT BY UNADJUSTED INDEX (Col. 2 X $38,315,774) Col. 6
Alachua	1.05	1.3385	1.4054	1.4177	543,203	512,857
Baker	1.13	.1460	.1650	.1664	63,757	55,941
Bay	1.07	1.1002	1.1772	1.1875	455,000	421,550
Bradford	1.15	.2357	.2711	.2735	104,794	90,310
Brevard	1.02	1.4960	1.5259	1.5392	589,756	573,204
Broward	.97	6.2586	6.0708	6.1240	2,346,458	2,398,031
Calhoun	1.20	.1022	.1226	.1237	47,397	39,159
Charlotte	.90	.1962	.1766	.1781	68,240	75,176
Citrus	1.06	.2140	.2268	.2288	87,666	81,996
Clay	1.05	.2750	.2888	.2913	111,614	105,368
Collier	.92	.3760	.3456	.3486	133,569	144,067
Columbia	1.15	.3810	.4382	.4420	169,356	145,983

TABLE III-A (Columns 1-6)
(Page 2)

COUNTY	CORRECTION FACTOR 1959-60 Col. 1	INDEX OF TAXPAYING ABILITY 1959-60 Col. 2	COL. 1 X COL. 2 Col. 3	ADJUSTED INDEX (Col. 3 X 1.00875) Col. 4	LOCAL TAX EFFORT BY ADJUSTED INDEX (Col. 4 X $38,315,774) Col. 5	LOCAL TAX EFFORT BY UNADJUSTED INDEX (Col. 2 X $38,315,774) Col. 6
Dade	.94	22.3766	22.0340	21.2181	8,129,880	8,573,767
De Soto	.98	.2374	.2327	.2347	89,927	90,962
Dixie	1.14	.0840	.0958	.0966	37,013	32,185
Duval	1.04	9.3828	9.7581	9.8436	3,771,652	3,595,092
Escambia	1.06	2.9626	3.1404	3.1679	1,213,805	1,135,143
Flagler	1.01	.1640	.1656	.1670	63,987	62,838
Franklin	1.07	.1092	.1168	.1178	45,136	41,841
Gadsden	1.10	.6240	.6864	.6924	265,298	239,090
Gilchrist	1.16	.0816	.0947	.0955	36,592	31,266
Glades	1.08	.1006	.1086	.1096	41,994	38,546
Gulf	1.15	.1734	.1994	.2011	77,053	66,440
Hamilton	1.19	.1488	.1771	.1786	68,432	57,014

TABLE III-A (Columns 1-6)
(Page 3)

COUNTY	CORRECTION FACTOR 1959-60	INDEX OF TAXPAYING ABILITY 1959-60	COL. 1 X COL. 2	ADJUSTED INDEX (Col. 3 X 1.00875)	LOCAL TAX EFFORT BY ADJUSTED INDEX (Col. 4 X $38,315,774)	LOCAL TAX EFFORT BY UNADJUSTED INDEX (Col. 2 X $38,315,774)
	Col. 1	Col. 2	Col. 3	Col. 4	Col. 5	Col. 6
Hardee	1.07	.2814	.3011	.3037	116,365	107,821
Hendry	1.07	.2919	.3123	.3150	120,695	111,844
Hernando	1.03	.2412	.2484	.2506	96,019	92,418
Highlands	1.05	.4769	.5007	.5051	193,533	182,728
Hillsborough	1.00	8.0273	8.0273	8.0976	3,102,658	3,075,722
Holmes	1.17	.1912	.2237	.2257	86,479	73,260
Indian River	1.02	.5258	.5363	.5410	207,288	201,464
Jackson	1.19	.6205	.7384	.7449	285,414	237,749
Jefferson	1.14	.1992	.2271	.2291	87,781	76,325
Lafayette	1.13	.0578	.0653	.0659	25,250	22,146
Lake	1.02	1.3496	1.3766	1.3886	532,053	517,110
Lee	1.00	1.0200	1.0200	1.0289	394,231	390,821

TABLE III-A (Columns 1-6)
(Page 4)

COUNTY	CORRECTION FACTOR 1959-60 Col. 1	INDEX OF TAXPAYING ABILITY 1959-60 Col. 2	COL. 1 X COL. 2 Col. 3	ADJUSTED INDEX (Col. 3 X 1.00875) Col. 4	LOCAL TAX EFFORT BY ADJUSTED INDEX (Col. 4 X $38,315,774) Col. 5	LOCAL TAX EFFORT BY UNADJUSTED INDEX (Col. 2 X $38,315,774) Col. 6
Leon	1.05	1.2748	1.3385	1.3502	517,340	488,449
Levy	1.11	.2410	.2675	.2698	103,376	92,341
Liberty	1.15	.0571	.0657	.0663	25,403	21,878
Madison	1.20	.2664	.3197	.3225	123,568	102,073
Manatee	.99	1.2220	1.2098	1.2204	467,606	468,219
Marion	1.10	1.1264	1.2390	1.2498	478,871	431,589
Martin	.97	.3493	.3388	.3418	130,963	133,837
Monroe	.89	.6531	.5813	.5864	224,684	250,240
Nassau	1.14	.3753	.4278	.4315	165,333	143,799
Okaloosa	1.05	.6054	.6357	.6413	245,719	231,964
Okeechobee	1.17	.1200	.1404	.1416	54,255	45,979
Orange	1.01	5.0578	5.1084	5.1532	1,974,488	1,937,935

TABLE III-A (Columns 1-6)
(Page 5)

COUNTY	CORRECTION FACTOR 1959-60 Col. 1	INDEX OF TAXPAYING ABILITY 1959-60 Col. 2	COL. 1 X COL. 2 Col. 3	ADJUSTED INDEX (Col. 3 X 1.00875) Col. 4	LOCAL TAX EFFORT BY ADJUSTED INDEX (Col. 4 X $38,315,774) Col. 5	LOCAL TAX EFFORT BY UNADJUSTED INDEX (Col. 2 X $38,315,774) Col. 6
Osceola	.98	.3362	.3295	.3324	127,362	128,818
Palm Beach	.95	5.0378	4.7859	4.8277	1,849,771	1,930,272
Pasco	.99	.7425	.7351	.7415	284,111	284,495
Pinellas	.85	7.0528	5.9932	6.0457	2,316,457	2,701,569
Polk	1.06	4.3988	4.6627	4.7035	1,802,182	1,685,434
Putnam	1.11	.6266	.6955	.7016	268,823	240,087
St. Johns	1.05	.7491	.7866	.7935	304,036	287,023
St. Lucie	1.05	.7694	.8079	.8150	312,274	294,802
Santa Rosa	1.05	.3586	.3765	.3798	145,523	137,400
Sarasota	.90	1.6640	1.4976	1.5107	578,836	637,574
Seminole	1.04	.8323	.8656	.8732	334,573	318,902
Sumter	1.11	.3101	.3442	.3472	133,032	118,817

TABLE III-A (Columns 1-6)
(Page 6)

COUNTY	CORRECTION FACTOR 1959-60 Col. 1	INDEX OF TAXPAYING ABILITY 1959-60 Col. 2	COL. 1 X COL. 2 Col. 3	ADJUSTED INDEX (Col. 3 X 1.00875) Col. 4	LOCAL TAX EFFORT BY ADJUSTED INDEX (Col. 4 X $38,315,774) Col. 5	LOCAL TAX EFFORT BY UNADJUSTED INDEX (Col. 2 X $38,315,774) Col. 6
Suwannee	1.16	.3520	.4083	.4119	157,823	134,871
Taylor	1.14	.2795	.3186	.3214	123,147	107,093
Union	1.00	.0816	.0816	.0823	31,534	31,266
Volusia	.95	2.7338	2.5971	2.6198	1,003,797	1,047,477
Wakulla	1.17	.0719	.0841	.0848	32,492	27,549
Walton	1.18	.2519	.2972	.2998	114,871	96,517
Washington	1.22	.1573	.1919	.1936	74,179	60,271
TOTAL		100.0000	99.1325	100.0000	$38,315,774	$38,315,774

EXPLANATION OF TABLE - (Columns 1-6)

1. In column 4, the corrected county indexes of taxpaying ability in column 3 are multiplied by 1.00875 so that they will total 100.00.

2. In column 5, the figure $38,315,774 was the total local effort required of all districts in 1960.

TABLE III-B (Columns 7-11)
Impact of Correction Factor Upon the Apportionment of School Funds in Florida, 1959-60

COUNTY	GAIN OR LOSS IN STATE FUNDS (Col. 6-Col. 5) Col. 7	PUBLIC SCHOOL ENROLLMENT 1960 Col. 8	GAIN OR LOSS IN STATE FUNDS PER PUPIL (Col. 7÷Col. 8) Col. 9	TOTAL EQUALIZED VALUATION (Col. 2 X $6,722,065,621) Col. 10	EQUALIZED VALUATION PER PUPIL ENROLLED (Col. 10÷Col. 8) Col. 11
Alachua	- 30,346	16,311	- $1.86	89,974,848	5,516
Baker	- 7,816	1,878	- 4.17	9,814,216	5,226
Bay	- 33,450	15,160	- 2.21	73,956,166	4,878
Bradford	- 14,484	3,272	- 4.43	15,843,909	4,842
Brevard	- 16,552	22,461	- .74	100,562,102	4,477
Broward	51,573	61,211	.84	420,707,199	6,873
Calhoun	- 8,238	2,160	- 3.81	6,869,951	3,181
Charlotte	6,936	1,995	3.48	13,188,693	6,611
Citrus	- 5,670	2,060	- 2.75	14,385,220	6,983
Clay	- 6,246	4,246	- 1.47	18,485,680	4,354
Collier	10,498	2,626	4.00	25,274,967	9,625
Columbia	- 23,373	5,259	- 4.44	25,611,070	4,870

TABLE III-B (Columns 7-11)
(Page 2)

COUNTY	GAIN OR LOSS IN STATE FUNDS (Col. 6-Col. 5) Col. 7	PUBLIC SCHOOL ENROLLMENT 1960 Col. 8	GAIN OR LOSS IN STATE FUNDS PER PUPIL (Col. 7÷Col. 8) Col. 9	TOTAL EQUALIZED VALUATION (Col. 2 X $6,722,065,621) Col. 10	EQUALIZED VALUATION PER PUPIL ENROLLED (Col. 10÷Col. 8) Col. 11
Dade	443,887	162,492	2.73	1,504,169,735	9,257
DeSoto	1,035	2,171	.48	15,958,184	7,351
Dixie	- 4,828	1,155	- 4.18	5,646,535	4,889
Duval	-176,560	96,648	- 1.83	630,717,972	6,526
Escambia	- 78,662	38,236	- 2.06	199,147,916	5,208
Flagler	- 1,149	915	- 1.26	11,024,188	12,048
Franklin	- 3,295	1,474	- 2.24	7,340,496	4,980
Gadsden	- 26,208	9,948	- 2.63	41,945,689	4,216
Gilchrist	- 5,326	778	- 6.85	5,485,206	7,050
Glades	- 3,448	671	- 5.14	6,762,398	10,078
Gulf	- 10,613	2,646	- 4.01	11,656,062	4,405
Hamilton	- 11,418	2,196	- 5.20	10,002,434	4,555

TABLE III-B (Columns 7-11)
(Page 3)

COUNTY	GAIN OR LOSS IN STATE FUNDS (Col. 6-Col. 5) Col. 7	PUBLIC SCHOOL ENROLLMENT 1960 Col. 8	GAIN OR LOSS IN STATE FUNDS PER PUPIL (Col. 7÷Col. 8) Col. 9	TOTAL EQUALIZED VALUATION (Col. 2 X $6,722,065,621) Col. 10	EQUALIZED VALUATION PER PUPIL ENROLLED (Col. 10÷Col. 8) Col. 11
Hardee	- 8,544	2,786	- 3.07	18,915,893	6,790
Hendry	- 8,851	1,807	- 4.90	19,621,710	10,859
Hernando	- 3,601	2,300	- 1.57	16,213,622	7,049
Highlands	- 10,805	4,603	- 2.35	32,057,531	6,964
Hillsborough	- 26,936	78,180	- .34	539,600,374	6,902
Holmes	- 13,219	2,959	- 4.47	12,852,589	4,344
Indian River	- 5,824	5,089	- 1.14	35,344,621	6,945
Jackson	- 47,665	10,399	- 4.58	41,710,417	4,011
Jefferson	- 11,456	2,457	- 4.66	13,390,355	5,450
Lafayette	- 3,104	732	- 4.24	3,885,354	5,308
Lake	- 14,943	11,592	- 1.29	90,720,998	7,826
Lee	- 3,410	10,645	- .32	68,565,069	6,441

TABLE III-B (Columns 7-11)
(Page 4)

COUNTY	GAIN OR LOSS IN STATE FUNDS (Col. 6-Col. 5) Col. 7	PUBLIC SCHOOL ENROLLMENT 1960 Col. 8	GAIN OR LOSS IN STATE FUNDS PER PUPIL (Col. 7÷Col. 8) Col. 9	TOTAL EQUALIZED VALUATION (Col. 2 X $6,722,065,621) Col. 10	EQUALIZED VALUATION PER PUPIL ENROLLED (Col. 10÷Col. 8) Col. 11
Leon	- 28,891	16,018	- 1.80	85,692,893	5,412
Levy	- 11,035	2,549	- 4.49	16,200,178	6,355
Liberty	- 3,525	833	- 4.23	3,838,299	4,608
Madison	- 21,495	4,117	- 5.22	17,907,583	4,350
Manatee	613	13,113	.05	82,143,642	6,264
Marion	- 47,282	12,344	- 3.83	75,717,347	6,134
Martin	2,874	3,123	.92	23,480,175	7,518
Monroe	25,556	7,482	3.42	43,901,811	5,868
Nassau	- 21,534	4,417	- 4.88	25,227,912	5,712
Okaloosa	- 13,755	13,143	- 1.05	40,695,385	3,096
Okeechobee	- 8,276	1,772	- 4.67	8,066,479	4,552
Orange	- 36,553	52,720	- .69	339,988,635	6,450

TABLE III-B (Columns 7-11)
(Page 5)

COUNTY	GAIN OR LOSS IN STATE FUNDS (Col. 6-Col. 5) Col. 7	PUBLIC SCHOOL ENROLLMENT 1960 Col. 8	GAIN OR LOSS IN STATE FUNDS PER PUPIL (Col. 7÷Col. 8) Col. 9	TOTAL EQUALIZED VALUATION (Col. 2 X $6,722,065,621) Col. 10	EQUALIZED VALUATION PER PUPIL ENROLLED (Col. 10÷Col. 8) Col. 11
Osceola	1,456	3,600	.40	22,599,585	6,278
Palm Beach	80,501	40,505	1.99	338,644,222	8,361
Pasco	384	6,974	.06	49,911,337	7,157
Pinellas	385,112	54,248	7.10	473,959,403	8,742
Polk	- 116,748	42,978	- 2.72	295,690,223	6,880
Putnam	- 28,736	7,907	- 3.63	42,120,463	5,327
St. Johns	- 17,013	6,445	- 2.64	50,354,994	7,813
St. Lucie	- 17,472	8,427	- 2.07	51,719,573	6,137
Santa Rosa	- 8,123	6,440	- 1.26	24,105,327	3,743
Sarasota	58,738	12,345	4.76	111,855,172	9,061
Seminole	- 15,671	11,726	- 1.34	55,947,752	4,771
Sumter	- 14,215	2,878	- 4.94	20,845,125	7,243

TABLE III-B (Columns 7-11)
(Page 6)

COUNTY	GAIN OR LOSS IN STATE FUNDS (Col. 6-Col. 5) Col. 7	PUBLIC SCHOOL ENROLLMENT 1960 Col. 8	GAIN OR LOSS IN STATE FUNDS PER PUPIL (Col. 7÷Col. 8) Col. 9	TOTAL EQUALIZED VALUATION (Col. 2 X $6,722,065,621) Col. 10	EQUALIZED VALUATION PER PUPIL ENROLLED (Col. 10÷Col. 8) Col. 11
Suwannee	- 22,952	4,032	- 5.69	23,661,671	5,868
Taylor	- 16,054	3,413	- 4.70	18,788,173	5,505
Union	- 268	1,175	- .23	5,485,206	4,668
Volusia	43,680	22,302	1.96	183,767,830	8,240
Wakulla	- 4,943	1,461	- 3.38	4,833,165	3,308
Walton	- 18,354	4,398	- 4.17	16,932,883	3,850
Washington	- 13,908	3,462	- 4.02	10,573,809	3,054
TOTAL	+1,112,843 -1,112,843	967,867		6,722,065,621	6,945

EXPLANATION OF TABLE I-B:

The figure $6,722,065,621 in column 10 was the total non-exempt assessed valuation of the state in 1960. Multiplying this total by the index of taxpaying ability of a county gives the equalized assessed valuation of that county. In 1959-60, property in Florida on the average was assessed at about 40 per cent of true value. However, homesteads up to an assessed valuation of $5,000 were exempted from all property taxes.

TABLE IV
Analysis of Gains or Losses in State School Funds Resulting From Application of the Correction Factor in Florida Counties, 1959-60

COUNTY	POPULATION LIVING IN INCORPORATED PLACES OF 1,000 AND ABOVE, 1960 Col. 1	TOTAL POPULATION 1960 Col. 2	PER CENT TOTAL POPULATION LIVING IN INCORPORATED PLACES OF 1,000 AND ABOVE Col. 3	GAIN OR LOSS IN STATE FUNDS 1960 Col. 4	GAIN OR LOSS PER INHABITANT INCORPORATED PLACES 1,000 AND ABOVE Col. 5
Alachua	36,276	75,304	48.2	-$ 30,346	-$ .84
Baker	2,671	7,363	36.3	- 7,816	- 2.93
Bay	40,981	67,131	61.0	- 33,450	- .82
Bradford	4,806	12,446	38.6	- 14,484	- 3.01
Brevard	57,673	111,435	51.8	- 16,552	- .29
Broward	193,698	333,946	58.0	51,573	.27
Calhoun	2,375	7,422	32.0	- 8,238	- 3.47
Charlotte	3,157	12,594	25.1	6,936	2.20
Citrus	3,301	9,268	35.6	- 5,670	- 1.71
Clay	6,857	19,535	35.1	- 6,246	- .91
Collier	4,655	15,753	29.5	10,498	2.26
Columbia	9,465	20,077	47.3	- 23,373	- 2.47

TABLE IV
(Page 2)

COUNTY	POPULATION LIVING IN INCORPORATED PLACES OF 1,000 AND ABOVE, 1960 Col. 1	TOTAL POPULATION 1960 Col. 2	PER CENT TOTAL POPULATION LIVING IN INCORPORATED PLACES OF 1,000 AND ABOVE Col. 3	GAIN OR LOSS IN STATE FUNDS 1960 Col. 4	GAIN OR LOSS PER INHABITANT INCORPORATED PLACES 1,000 AND ABOVE Col. 5
Dade	580,584	935,047	62.1	443,887	.76
DeSoto	5,889	11,683	50.4	1,035	.18
Dixie	1,857	4,479	41.5	- 4,828	- 2.60
Duval	220,344	455,411	48.4	- 176,560	- .80
Escambia	56,752	173,829	32.6	- 78,662	- 1.39
Flagler	1,860	4,566	40.7	- 1,149	- .62
Franklin	3,099	6,576	41.1	- 3,295	- 1.06
Gadsden	21,809	41,989	51.9	- 26,208	- 1.20
Gilchrist	0	2,868	0	- 5,326	- —
Glades	0	2,950	0	- 3,448	- —
Gulf	5,653	9,937	56.9	- 10,613	- 1.88
Hamilton	2,103	7,705	27.3	- 11,418	- 5.43

TABLE IV
(Page 3)

COUNTY	POPULATION LIVING IN INCORPORATED PLACES OF 1,000 AND ABOVE, 1960	TOTAL POPULATION 1960	PER CENT TOTAL POPULATION LIVING IN INCORPORATED PLACES OF 1,000 AND ABOVE	GAIN OR LOSS IN STATE FUNDS 1960	GAIN OR LOSS PER INHABITANT INCORPORATED PLACES 1,000 AND ABOVE
	Col. 1	Col. 2	Col. 3	Col. 4	Col. 5
Hardee	4,582	12,370	37.0	- 8,544	- 1.86
Hendry	4,376	8,119	53.9	- 8,851	- 2.02
Hernando	3,301	11,205	29.5	- 3,601	- 1.09
Highlands	14,019	21,338	65.7	- 10,805	- .77
Hillsborough	296,357	397,788	74.5	- 26,936	- .09
Holmes	2,222	10,844	20.5	- 13,219	- 5.95
Indian River	8,849	25,309	35.0	- 5,824	- .66
Jackson	10,858	36,208	30.0	- 47,665	- 4.39

TABLE IV
(Page 4)

COUNTY	POPULATION LIVING IN INCORPORATED PLACES OF 1,000 AND ABOVE, 1960	TOTAL POPULATION 1960	PER CENT TOTAL POPULATION LIVING IN INCORPORATED PLACES OF 1,000 AND ABOVE	GAIN OR LOSS IN STATE FUNDS 1960	GAIN OR LOSS PER INHABITANT INCORPORATED PLACES 1,000 AND ABOVE
	Col. 1	Col. 2	Col. 3	Col. 4	Col. 5
Jefferson	2,490	9,543	26.1	- 11,456	- 4.60
Lafayette	0	2,889	0	- 3,104	- _
Lake	30,618	57,383	53.4	- 14,943	- .49
Lee	22,523	54,539	41.3	- 3,410	- .15
Leon	48,174	74,225	64.9	- 28,891	- .60
Levy	1,459	10,364	14.1	- 11,035	- 7.56
Liberty	1,582	3,138	50.4	- 3,525	- 2.22
Madison	4,557	14,154	32.2	- 21,495	- 4.72
Manatee	27,203	69,168	39.3	613	.02
Marion	14,677	51,616	28.4	- 47,282	- 3.22
Martin	4,791	16,932	28.3	2,874	.60
Monroe	33,956	47,921	70.9	25,556	.75

TABLE IV
(Page 5)

COUNTY	POPULATION LIVING IN INCORPORATED PLACES OF 1,000 AND ABOVE, 1960	TOTAL POPULATION 1960	PER CENT TOTAL POPULATION LIVING IN INCORPORATED PLACES OF 1,000 AND ABOVE	GAIN OR LOSS IN STATE FUNDS 1960	GAIN OR LOSS PER INHABITANT INCORPORATED PLACES 1,000 AND ABOVE
	Col. 1	Col. 2	Col. 3	Col. 4	Col. 5
Nassau	8,351	17,189	48.6	- 21,534	- 2.58
Okaloosa	30,106	61,175	49.2	13,755	.46
Okeechobee	2,947	6,424	45.9	8,276	2.81
Orange	122,930	263,538	46.7	- 36,553	- .30
Osceola	11,198	19,029	58.9	1,456	.13
Palm Beach	160,516	228,106	70.4	80,501	.50
Pasco	13,097	36,785	35.6	384	.03
Pinellas	274,157	374,665	73.2	385,112	1.40
Polk	116,773	195,139	59.8	- 116,748	- 1.00
Putnam	12,657	32,212	39.3	- 28,736	- 2.27
St. Johns	14,734	30,034	49.1	- 17,013	- 1.15
St. Lucie	25,256	39,294	64.3	- 17,472	- .69

TABLE IV
(Page 6)

COUNTY	POPULATION LIVING IN INCORPORATED PLACES OF 1,000 AND ABOVE, 1960	TOTAL POPULATION 1960	PER CENT TOTAL POPULATION LIVING IN INCORPORATED PLACES OF 1,000 AND ABOVE	GAIN OR LOSS IN STATE FUNDS 1960	GAIN OR LOSS PER INHABITANT INCORPORATED PLACES 1,000 AND ABOVE
Santa Rosa	4,108	29,547	13.9	- 8,123	- 1.98
Sarasota	37,527	76,895	48.8	- 58,738	1.56
Seminole	26,465	54,947	48.2	- 15,671	- .59
Sumter	2,170	11,869	18.3	- 14,215	- 6.55
Suwannee	6,544	14,961	43.7	- 22,952	- 3.51
Taylor	8,030	13,168	61.0	- 16,054	- 2.00
Union	1,311	6,043	21.7	- 268	- .20
Volusia	78,291	125,319	62.5	43,680	.56
Wakulla	0	5,257	0	- 4,934	- _
Walton	5,282	15,576	33.9	-18,354	- 3.47
Washington	- 3,159	11,249	28.1	-13,908	- 4.40
TOTAL	2,767,968	4,952,788	55.9	+1,112,843 -1,112,843	

CHAPTER III

APPLICATION OF THE CORRECTION FACTOR TO APPORTIONMENT OF SCHOOL FUNDS IN ILLINOIS

with comments by William P. McLure

The complexity of governmental structures in Illinois makes this state one of the most unique ones in the nation for testing the local tax allocation Correction Factor as well as any principle of apportioning state school funds.

There are 1478 local school districts of which 367 operate grades kindergarten through twelve, 233 operate only high schools, and 878 operate elementary schools. The principle non-educational agencies are municipalities and counties. These are supplemented by some ten or more types of minor agencies such as sanitary districts, drainage districts, park districts, health districts, and public libraries.

There is little congruity among the districts. Boundaries of most school districts extend over county and municipal lines. The high school districts extend over two or more elementary school districts. In only a few rare cases are the outer boundaries of elementary school districts congruent with the overlying high school districts.

Aside from the pattern of local governmental structure for administration of services, the inter-governmental tax structure has a bearing on methods of apportioning state school funds. In this state the property tax base is allocated to local government. There is only a very nominal state property tax to pay obligations to a few townships which transferred sixteenth section lands to the state many years ago. In addition to the property tax the state allocates a one-half cent local sales (Retailers' Occupation) tax to municipalities and counties subject to local levy. Municipalities are authorized to levy miscellaneous utility and automobile excises. In addition, municipalities may levy certain charges for non-tax revenue such as parking fees. The local non-property taxes and charges in lieu of taxes afford some relief to non-educational agencies which is not available to school districts.

The state government in Illinois exercises two basic controls over the property tax which may be relevant to a test of the Correction Factor. The first one is a procedure for estimating equalized assessed valuation of property. Actual assessment is a local function of elected township assessors. There are about 1400 townships with boundaries which have little relationship to school district boundaries. A citizen, for example, may have property which is divided between two townships. The parts may be assessed at different ratios of assessed to true value.

The State Revenue Department is authorized to estimate quadrennially the average ratio of actual assessed value to true market value of property in each county. The department uses a sampling procedure to make this estimate which is applied to actual assessments in all townships to obtain equalized valuations. A standard ratio specified by law, is used by the department to correct the estimated average assessment in each county. The equalized valuations thus obtained are used for purposes of distributing the state funds which are based on the equalization principle.

The other basic state control over the property tax consists of limitations on rates of levy by local agencies of government. In the case of school districts there is a minimum which local boards can levy without local referendum. There is also a specified maximum which the boards can levy. However, to reach the maximum a procedure with successive referenda must be followed with a specified limit to be voted at each referendum. All limits for school levies in Chicago must be approved by the state legislature.

To test the Correction Factor in Illinois the writer has selected two groups of cities. One has a single district which operates kindergarten and twelve grades. The other has dual districts, one operating elementary schools and another high schools.

Cities with Unit (K-12 grade) School Districts

The first group of cities is shown in Table V. These cities have unit (K-12 grade) school districts. In eight instances the school district is coterminous with the city. In eleven others the district extends beyond the city but the proportion of population in the district living outside the city in most instances is small.

Ten of these districts have a Correction Factor of less than 1.0. Eight are greater than 1.0 and one is equal to 1.0. The impact of this Correction Factor on state aid is shown in Table VI. The fiscal year 1962-63 was selected to test the impact because of availability and recency of appropriate data. It is assumed that the Correction Factor did not change significantly from 1960 to 1962.

In Table VII the Correction Factor is applied to the local tax rate of $0.0067 of assessed valuation of property. This rate of $0.0067 is the amount which is used in the Illinois law to compute the local district's contribution to the state school foundation program in unit (12-grade) districts. In Illinois this is called the qualifying rate. The Correction Factor is multiplied by the qualifying rate of $0.0067 to obtain the adjusted local qualifying rate. This figure is shown in Column 4 of Table VI. The adjusted rates range from $0.0084 in Batavia to $0.0059 in Chicago.

The adjusted qualifying rate is next multiplied by the assessed valuation. The result is shown in Column 5 as the local contribution which is based on the adjusted qualifying rate. If the local contribution is less than the equalization cost[1] of the foundation program the district receives the difference as special equalization aid. If the local contribution is greater than the equalization cost the district receives only flat grants.

The impact of the Correction Factor applies only to equalization aid. The effect on this sample of school districts is shown in Columns 7, 8, and 9 of Table VI. Column 7 shows the amount of equalization aid which each district would receive if the adjusted qualifying rate were applicable. Column 8 shows the actual amount of equalization aid. The difference is shown in Column 9. For example, Alton with a Correction Factor of 1.03

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[1] Equalization cost equals $252 times number of pupils in ADA minus flat grants. Every district is given $32 per pupil in ADA for grades 9-12 and $47 per pupil in ADA in grades K-8.

would have its equalization aid reduced by $36,000. Chicago with a Correction Factor of .88 would receive an increase of $8,365,000. Rock Island, on the other hand, with a Correction Factor of 1.0 would have no change.

Thus all of the districts with Correction Factors less than 1.0 would receive increases in equalization aid. Those with factors greater than 1.0 would receive reductions in equalization aid. The flat grants would not be affected and hence are not shown. Application of the Correction Factor could, of course, be adjusted so that no district would have its aid reduced.

Table VII shows the computation of the Correction Factor for cities in which two types of school districts are operated separately. One is for elementary schools, sometimes including junior high schools, and the other is for high schools. These districts have a far greater overlap or incongruity of boundaries with respect to the cities than the unified districts. This group which is selected to test the Correction Factor ranges from 25,000 to 79,283 in population.

Like the cities with unit school districts, about half (nine) of these have Correction Factors below 1.0. The other half (ten) have factors above 1.0. The range in the Correction Factor in the former group is from 1.26 to .88. In the group shown in Table VII the range is from 1.20 to .78.

The application of the Correction Factor in these cities is made to the separate school districts identified with the respective city. Table VIII presents the computations to show the impact of the Correction Factor on state aid for the high school districts in 1962-63. In this group only one district, Calumet City, receives special equalization aid. Since the Correction Factor is .91 the adjusted aid would be $105,000, an increase of $49,000 over the actual equalization aid.

The other districts receive only a flat grant of $32 per pupil in average daily attendance. No district with a correction of less than 1.0 has an adjusted local contribution less than the equalization cost. Hence there is no change for these districts.

Table IX shows the computations for the impact of the Correction Factor on state aid for the elementary school districts in the corresponding cities. Some of these cities have more than one elementary district. Oak Lawn and Skokie have four each which converge in the city but extend beyond the municipal boundaries. Twenty-four of these districts receive special equalization aid and six receive only flat grants. Ten of these theoretically would receive less aid with the local tax Correction Factor because of a factor value greater than 1.0. Twelve would receive an increase. Berwyn (South), now entitled to only flat grant aid would receive $46,000 of equalization aid with the Correction Factor.

Summary

This chapter applies the Correction Factor to local school districts in Illinois, to adjust for the impact on the property tax base of the extra cost of municipal government which can be attributed to a higher-than-average proportion of total population to public school enrollment. The Correction Factor is applied to school districts which range from about 7,500 to 126,000 population. In addition, Chicago with 3 1/2 million population is included. Only two cities in the sample are below 25,000 in population.

The test of the factor is the impact on state aid which local districts receive under the foundation program formula. Illinois is a state which guarantees a flat grant of aid to every district regardless of whether it qualifies for foundation aid. For those who participate in foundation aid the flat grant is absorbed as part of the foundation. The difference between the total foundation aid and the flat grant is known as special equalization aid. Thus the effect of the Correction Factor is to raise or lower the amount of special equalization. In the application of the Correction Factor one must assume that no district would have its aid reduced.

Application of this factor to a sample of districts in Illinois yields the following findings:

1. The Correction Factor would increase the amount of state aid to

school districts in nine of nineteen cities with unified districts which operate schools for grades kindergarten through 12.

2. **In eighteen cities which have dual districts seven would receive additional aid in one or more of the school districts.**

The local tax allocation Correction Factor appears to be sound in principle. Its application in Illinois would present certain problems, however. First, there is an unknown error in applying the factor to dual school districts because of lack of congruity between boundaries of school districts and municipalities. This error is relatively small in cities with unit (single) school districts. Second, the large number of school districts with no city above 25,000 population presents a difficult problem for applying the Correction Factor. However, this problem could be managed by setting a limit on the size of the community for application of the factor.

There is some indirect offset equivalent to the Correction Factor which cities gain through local municipal sales tax. However, this gain goes to cities irrespective of the proportion of adults to school population or of the per capita cost of services. The relief to the property tax base resulting from local sales taxes does not equalize the burden between schools and municipal government. The remaining support of non-educational government **which comes from the property tax presents a substantial burden on this tax base. So long as this condition exists there is ample justification for the Correction Factor.**

The state foundation program is based on the assumption that all local school districts have equal access to a local property tax base of equalized assessed valuations. This assumption is valid under either of two conditions. One is that the proportion of all property taxes going to schools is the same in all districts. The other condition would exist if the total cost of local non-educational government were shifted to non-property taxes. Neither one of these conditions exists nor will likely exist.

Therefore, the local tax allocation Correction Factor is justified to

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give some relief to school districts for the portion of the burden of cost of municipal government on the property tax which is attributed to a higher-than-average ratio of total population to public school attendance. This correction does not adjust for the encroachment on the property tax base of municipal government for that portion of cost which is attributed to higher-than-average per capita cost of municipal services. Another type of correction will be necessary to solve this problem.

TABLE V

COMPUTATION OF CORRECTION FACTOR FOR ILLINOIS CITIES WITH UNIT SCHOOL DISTRICTS

City (1)	Population 1960 (2)	Total Public School Enrol. 1960 (3)	Ratio Pop. Over Public School Enrol. (4)	% of Total K-12 Enrol. in Public Schools (5)	Correction Factor[1] (6)
Alton	43,047	7,613	5.65	80%	1.03
Aurora (E & W)	63,715	9,503	6.70	70	.94
Batavia	7,496	2,110	3.55	--	1.26
Champaign	49,583	7,228	6.86	87	.93
Chicago[2]	3,550,404	465,328	7.63	67	.88
Collinsville	14,217	2,207	6.44	72	.96
Danville[2]	41,856	7,113	5.88	84	1.01
Decatur[2]	78,004	15,084	5.17	89	1.07
East St. Louis	81,712	15,276	5.35	84	1.05
Galesburg	37,243	5,895	6.32	84	.97
Granite City	40,073	8,129	4.93	87	1.09
Kankakee[2]	27,666	4,446	6.22	73	.98
Moline	42,705	8,145	5.24	85	1.06
Peoria[2]	103,162	16,606	6.21	79	.98
Quincy	43,793	6,561	6.67	72	.94
Rockford[2]	126,706	23,226	5.46	84	1.05
Rock Island[2]	51,363	8,711	5.95	77	1.00
Springfield[2]	83,271	11,916	6.99	70	.92
Urbana	27,294	4,063	6.72	97	.94
State	10,081,653	1,689,995	5.97	77	1.00

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[1] Correction Factor = 2/(1+Col.4/5.97)

[2] School district boundary is coterminous with the municipality.

Source: Columns 2, 3, 5 derived from United States Census of Population, 1960. Illinois: PC(1) 15 C, Tables 72 and 73.

TABLE VI

IMPACT OF CORRECTION FACTOR UPON THE APPORTIONMENT OF SCHOOL FUNDS IN ILLINOIS CITIES WITH UNIT DISTRICTS

1962-1963

City (1)	Assessed Valuation Property ($000) (2)	Correction Factor (3)	Adjusted Local Qualifying Tax Rate. (3)x .0067[1] (4)	Local Contribution to Foundation at Adjusted Qualifying Rate ($000) (5)	Foundation Cost ($252xADA) minus Flat Grant[2] ($000) (6)	Special Equalization Aid with Correction Factor. (6) minus (5) ($000) (7)	Special Equalization Aid Actual ($000) (8)	Difference (Inc. or Dec. in Aid) ($000) (9)
Alton	$ 179,683	1.03	.0069	$ 1,240	$ 2,145	$ 905	$ 941	$ -36
Aurora	293,072	.94	.0063	1,846	2,802	956	839	117
Batavia	29,611	1.26	.0084	249	416	167	217	-50
Champaign	168,460	.93	.0062	1,044	1,880	836	752	84
Chicago	10,457,256	.88	.0059	61,698	91,589	29,891	21,526	8,365
Collinsville	81,372	.96	.0064	521	1,250	729	704	25
Danville	120,177	1.01	.0068	817	1,923	1,106	1,118	-12
Decatur	306,974	1.07	.0072	2,210	3,657	1,447	1,600	-153
East St. Louis	249,964	1.05	.0070	1,750	3,977	2,227	2,302	-75
Galesburg	142,900	.97	.0065	930	1,490	560	532	28
Granite City	182,622	1.09	.0073	1,333	2,311	978	1,088	-110
Kankakee	122,714	.98	.0066	810	1,326	516	503	13
Moline	176,719	1.06	.0071	1,255	2,005	750	821	-71
Peoria	464,905	.98	.0066	3,068	3,305	237	190	47
Quincy	189,347	.94	.0063	1,193	1,584	391	315	76
Rockford	540,046	1.05	.0070	3,780	4,985	1,205	1,367	-162
Rock Island	178,061	1.00	.0067	1,193	2,036	843	843	0
Springfield	333,039	.92	.0062	2,065	3,640	1,575	1,409	166
Urbana	75,237	.94	.0063	474	957	483	452	31

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[1] Computed by multiplying the Correction Factor in Column 3 times 0.0067, the required (qualifying) rate for local contribution of Unit Districts to the State Foundation of $252 per pupil in ADA.

[2] The foundation cost minus a flat grant of $32 per pupil in ADA in high school and $47 per pupil in elementary school.

TABLE VII

COMPUTATION OF CORRECTION FACTOR FOR ILLINOIS CITIES WITH DUAL DISTRICTS

City	Population 1960	Total Public School Enrol. 1960	Ratio Pop. Over Public School Enrol.	% of Total K-12 Enrol. in Public Schools	Correction Factor
Arlington Heights	27,878	5,849	4.77	74.0%	1.11
Belleville	37,264	4,924	7.57	62.6	.88
Berwyn	54,224	6,329	8.57	68.0	.82
Calumet City	25,000	3,509	7.12	65.6	.91
Chicago Heights	34,331	5,812	5.91	74.0	1.01
Cicero	69,130	7,358	9.40	58.7	.78
Des Plaines	34,886	6,841	5.10	76.6	1.08
Elmhurst	36,991	7,192	5.14	73.7	1.08
Evanston	79,283	9,940	7.98	77.8	.85
Harvey	29,071	5,217	5.57	80.8	1.04
Highland Park	25,532	5,867	4.35	87.0	1.16
Joliet	66,780	8,849	7.55	63.1	.88
Maywood	27,330	4,397	6.22	77.4	.98
Oak Lawn	27,471	4,272	6.43	59.1	.96
Oak Park	61,093	7,161	8.53	61.4	.82
Park Forest	29,993	7,558	3.97	89.0	1.20
Pekin	28,146	5,791	4.86	90.4	1.10
Skokie	59,364	12,484	4.76	81.4	1.11
Waukegan	55,719	10,451	5.33	84.8	1.06

TABLE VIII

IMPACT OF CORRECTION FACTOR UPON STATE AID FOR HIGH SCHOOL DISTRICTS IN ILLINOIS CITIES, 1962-63

City (1)	Assessed Valuation Property ($000) (2)	Correction Factor (3)	Adjusted Local Qualifying Tax Rate. (3)x .0054[1] (4)	Local Contribution to Foundation at Adjusted Qualifying Rate ($000) (5)	Foundation Cost ($252xADA) minus Flat Grant[2] ($000) (6)	Special Equalization Aid with Correction Factor. (6) minus (5) ($000) (7)	Special Equalization Aid. Actual ($000) (8)	Difference (Inc. or Dec. in Aid) ($000) (9)
Arlington Heights	$337,812	1.11	.0060	$2,027	$1,323	$ -704	$ 0	$ 0
Belleville	219,626	.88	.0048	1,054	650	-404	0	0
Calumet City	98,382	.91	.0049	482	587	105	56	49
Chicago Heights	179,933	1.01	.0055	990	607	-383	0	0
Cicero	538,760	.78	.0042	2,263	1,311	-952	0	0
Des Plaines	374,854	1.08	.0058	2,174	1,384	-790	0	0
Elmhurst	346,669	1.08	.0058	2,011	1,179	-832	0	0
Evanston	325,513	.85	.0046	1,497	791	-706	0	0
Harvey	278,899	1.04	.0056	1,562	1,177	-385	0	0
Highland Park	215,563	1.16	.0063	1,358	607	-751	0	0
Joliet	297,749	.88	.0048	1,429	801	-628	0	0
Maywood	427,582	.98	.0053	2,266	1,376	-890	0	0
Oak Lawn	232,507	.96	.0052	1,209	776	-433	0	0
Oak Park	278,679	.82	.0044	1,226	641	-585	0	0
Park Forest	97,434	1.20	.0065	633	464	-169	0	0
Pekin	131,726	1.10	.0059	777	501	-276	0	0
Skokie	486,190	1.11	.0060	2,917	1,142	-1,775	0	0
Waukegan	242,256	1.06	.0057	1,381	671	-710	0	0

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[1] Computed by multiplying the Correction Factor in Col. 3 times 0.0054, the required (qualifying) rate for local contribution of Dual Districts (high school and elementary) to the State Foundation of $252 per pupil in ADA.

[2] The foundation cost minus a flat grant of $32 per pupil in ADA in high school.

TABLE IX

IMPACT OF CORRECTION FACTOR UPON STATE AID FOR ELEMENTARY SCHOOL DISTRICTS IN ILLINOIS CITIES, 1962-63

City (1)	Assessed Valuation Property ($000) (2)	Correction Factor (3)	Adjusted Local Qualifying Tax Rate. (3)x .0054 (4)	Local Contribution to Foundation at Adjusted Qualifying Rate ($000) (5)	Foundation Cost ($252xADA) minus Flat Grant ($000) (6)	Special Equalization Aid with Correction Factor. (6) minus (5) ($000) (7)	Special Equalization Aid. Actual ($000) (8)	Difference (Inc. or Dec. in Aid) ($000) (9)
Arlington Heights	$110,161	1.11	.0060	$ 661	$1,134	$ 474	$ 540	$-66
Belleville	119,086	.88	.0048	572	702	130	59	71
Berwyn (North)	56,269	.82	.0044	248	230	-18	0	0
Berwyn (South)	85,991	.82	.0044	378	424	46	0	46
Calumet City (Wentworth Wilson)	18,639	.91	.0049	91	128	37	27	10
Calumet City	16,304	.91	.0049	80	133	53	45	8
Calumet City (Hoover-Schrum)	15,624	.91	.0049	77	197	120	113	7
Chicago Heights	106,447	1.01	.0055	585	781	196	206	-10
Cicero	268,418	.78	.0042	1,127	860	-267	0	0
Des Plaines	128,495	1.08	.0058	745	1,070	325	376	-51
Elmhurst	160,162	1.08	.0058	929	1,067	138	202	-64
Evanston	325,513	.85	.0046	1,497	1,771	274	13	261
Harvey (West)	35,552	1.04	.0056	199	371	172	179	-7
Harvey (Public)	61,277	1.04	.0056	343	549	206	218	-12

TABLE IX (Continued)

City (1)	Assessed Valuation Property ($000) (2)	Correc-tion Factor (3)	Adjusted Local Qualifying Tax Rate. (3)x .0054 (4)	Local Contribu-tion to Foundation at Adjusted Qualifying Rate ($000) (5)	Foundation Cost ($252xADA) minus Flat Grant ($000) (6)	Special Equal-ization Aid with Correction Factor. (6) minus (5) ($000) (7)	Special Equal-ization Aid. Actual ($000) (8)	Difference (Inc. or Dec. in Aid) ($000) (9)
Highland Park	$ 42,458	1.16	.0063	$ 267	$ 184	$ -83	$ 0	$ 0
Highland Park	80,729	1.16	.0063	509	539	30	103	-73
Joliet	227,406	.88	.0048	1,091	1,741	650	513	137
Maywood	135,776	.98	.0053	720	917	197	183	14
Oak Lawn (South Stickney)	69,026	.96	.0052	359	813	454	440	14
Oak Lawn (North Palos)	14,106	.96	.0052	73	261	188	185	3
Oak Lawn (Ridgeland)	28,139	.96	.0052	146	398	252	246	6
Oak Lawn (Hometown)	74,079	.96	.0052	385	739	354	339	15
Oak Park	209,490	.82	.0044	922	818	-104	0	0
Park Forest	55,301	1.20	.0065	359	810	451	512	-61
Pekin	105,475	1.10	.0059	622	990	368	421	-53
Skokie	86,424	1.11	.0060	519	695	176	228	-52
Skokie	63,134	1.11	.0060	379	368	-11	27	-27
Skokie (Fairview)	62,615	1.11	.0060	376	148	-228	0	0
Skokie (Cleveland)	51,148	1.11	.0060	307	351	44	75	-31
Waukegan	227,313	1.06	.0057	1,296	1,489	193	261	-68

CHAPTER IV

APPLICATION OF THE CORRECTION FACTOR TO APPORTIONMENT OF SCHOOL FUNDS IN NEW YORK

with comments by Arvid J. Burke

This chapter describes certain effects of using the Correction Factor in determining state school support in cities having a population of 50,000 or more in New York State. School support is not apportioned by counties, so county data are not included.

New York City Effects

Since New York City accounts for about 1 million of the 3 million pupils in the state and has more than 46% of its population, the effects are analyzed first as they apply to the City. As may be seen in Tables XII and XIII the correction would increase state support for public school operating expense in the City by more than 18 per cent. This is the equivalent of a reduction of $1.17 per thousand in its total property tax rate on full valuation ($37.85 per thousand) or about 3 per cent. The property tax rate equivalent of the City's local appropriation for schools could be reduced nearly 8 per cent. Since the school system of the City is fiscally dependent, the use of the Correction Factor would release local funds for the support of other government functions without increasing either school support or local tax leeway for such support.

There should be no question about the need for additional school funds in the City far in excess of what the correction would provide. Whether an increase in state support of 18 per cent to the City is justifiable in terms of the needs and fiscal capacity of the City relative to the needs and fiscal capacity of the remainder of the state is a difficult question to answer. It involves weighing a large number of considerations including:

1. New York City is exceptional in that it has had commercial rent control until this year and it still has residential rent control. Outside of New York City rent controls were discontinued years ago.

2. Residential property in New York City is predominantly rental property; outside of the City owner-occupied dwellings prevail in the residential valuation.
3. Market value has been a major factor in determining full valuation outside of the City. In the City, investment value determined by fixed rental return has been a major factor.
4. Since rent controls no longer are imposed by state law but by local law, it could be said that the City itself is in effect keeping its property taxing potential below what it should be if the market were free to operate.
5. No study has determined the extent to which rent control has tended to hold down property valuation in the City. It is possible that complete removal of rent controls might result in a 10 per cent increase in property values. The City collects about 47 per cent of the property taxes in the state, although property tax rates are more limited by the Constitution in New York City than in other cities in the state. The 47 per cent could well approximate the proportion of full valuation in the City which would result from the removal of rent controls (the present proportion is about 42.0 per cent which is far below the proportion for any other economic indicator applied to the City). New York City has about 47 per cent of the income and sales tax bases in the state.
6. The effect of rent controls in holding down increases in property values together with rigid property tax limits probably have contributed to the growth of local nonproperty taxes in the City. The City derives 35 per cent of its local revenues from nonproperty taxes. Although all local taxes for schools in New York City are reported as being derived from property taxes, the schools actually are supported locally by an appropriation only 65 per cent of which probably is derived from property taxes.

7. The ability of the City to pay local property and nonproperty taxes is enhanced by its large resident employed labor force relative to its total dependent population and particularly to its school age population. The City in 1960 with over 50.0 per cent of the employed resident labor force in the state had 44.0 per cent of the population not in the employed labor force and about 40.0 per cent of the population of school-age (5-17). The City had 1.61 employed workers per child under 18 as compared with 1.08 for the rest of the state.
8. The nature of economic activity in the City (amusements, hotels, wholesale and retail trade, restaurants, advertising, finance, publishing and other specialized services); the large numbers of daily commuters, transients, and visitors; and the relative underassessment of residential property on the tax rolls facilitate the export of both property and sales taxes.
9. The City, on the other hand, representing a consolidation of hundreds of small school districts in five counties probably is penalized relative to the rest of the state where not even a single county consolidation exists, when property valuation per pupil is used to predict property tax yields.
10. It also is possible that the weighted pupil measures may not reflect the educational needs of a population such as that found in New York City. Whether such measures are any more inexact in large cities than in other cities and school districts is not known. New York City has a lower percentage of children of school age in public school than all but three counties in the state (Albany, Erie, and Rensselaer). Thus the use of public school attendance in determining local property taxing potential for school support might tend to magnify the City's capacity to finance public schools.

These conflicting considerations do not lend themselves to precise mathematical balancing. While it might appear that the possible error in total property valuation might be on the low side in New York City, this hypothesis might not hold for property valuation per pupil. Table XIV shows that the index of full valuation per capita for the City as compared with the state is 92. If it were not for rent control, this index might be close to 100 or the state average.

However, the City does not have as high a proportion of dependent population or population of school age as does the remainder of the state as indicated by the higher index numbers (97 and 95 respectively) for these two factors in the table. This might indicate that the true property taxing potential for educating all children might exceed the state average. The present law gives the City an index of 118. The correction gives it an index of 104. The available data simply do not provide a basis for saying which of these two is closest to the true index of fiscal capacity to support public education.

Application to Other Fiscally Dependent City School Systems

There are five other cities in the state with a population of 125,000 or more which under the State Constitution have fiscally dependent school districts with no separate taxing and borrowing powers. These are Albany, Buffalo, Rochester, Syracuse, and Yonkers. As in New York City these cities and school districts have the same boundaries.

The five in 1960 accounted for 8.3 per cent of the population of the state, but only 6.5 per cent of its public school enrollment. Except for Yonkers, all are experiencing a gradual decline in population.

The Correction Factor would produce substantial increases in state funds for operating expense of public schools in all five, ranging from 12 per cent in Rochester to over 20 per cent in Buffalo (Table XII). The tax rate equivalents of these increases range from $0.58 to $1.17 per thousand on the full valuation of taxable property (Table XIII). The total property tax rates for the five average about $33.00 per thousand on full valuation.

Whether or not such increases are equitable in terms of the needs and fiscal capacity of the remainder of the state depends upon the assessment made of the following conditions, some of which are different from those in New York City.

1. These five cities in 1959-60 have a higher proportion of the full valuation of the state (8.1%) than would be predicted from estimated income of residents (7.8% of the state total), but much less than would be predicted from their percentage of total retail sales (10.5%). An unusually high percentage of unemployment in Buffalo in 1959-60 affects its income figures.

2. Such cities, however, might be expected to have greater fiscal capacity as indicated by property valuation than would be predicted from estimated income of residents. This is due to such factors as the concentration of industry, manufacturing, warehousing, retail outlets, and communication, commercial, financial, and transportation facilities. The large commuter and transient populations make possible considerable export of property and sales taxes as in New York City.

3. All five are very close to their constitutional property taxing limits. Any property tax relief provided under the Correction Factor would be relief for total city governments. To the extent that such relief is used for support of other governmental functions, the correction would not improve the fiscal position of the city school districts - either as to amount of support or as to leeway for support.

4. As was true in New York City, none of the cities depend entirely upon local property taxes for the support of schools and city government. All have nonproperty taxing powers. Albany and Yonkers

have made limited use of these taxing powers. Buffalo and Rochester receive most of their nonproperty tax receipts from a county collected sales tax which in Buffalo is earmarked for schools and which in Rochester is used to support both schools and city government. Syracuse has a city sales tax which is used to support schools directly or indirectly.

5. The allocation of governmental functions (such as welfare, public health, transportation, and water supply) between the city and the overlapping county government, or, one or more overlapping public authorities, differs among the five cities. Regardless of these differences in functions supported by city taxes, the correction in each case accrues entirely to the city government.

6. The five cities differ from New York City in that their proportion of total state full valuation of property (8.1%) exceeds their proportion of state total property tax collections (7.9%) for fiscal 1960. With 6.5 per cent of the public school enrollment they had 5.7 of local school taxes for the same year. Their property tax rates for schools tend to be very low relatively, their tax rates for other purposes above the state average, and their total property tax rates below the state average.

7. These cities with fiscally dependent school systems tend to allocate a below average proportion of local taxes to the support of public education. The per cent of city property taxes allocated for school support (1960) range from 23.6 in Buffalo to 37.0 per cent in Yonkers. In New York City the percentage was 37.7 and for the state as a whole, 43.2. Whether this reflects differences in total governmental needs or differences in public values and public pressures is not known.

8. Like New York City these large cities have a much higher ratio of employed persons to children of school age than does the remainder of the state. They have 8.3 per cent of the employed labor force in the

state to support 7.7 per cent of the children of school age (5-17). The ratios of employed persons to children under 18 range from 1.25 in Buffalo to 1.49 in Albany as compared with 1.08 for the state exclusive of New York City.

9. With a declining population in these cities, full valuation of property tends to increase faster than public school population. This causes full valuation per pupil to rise and makes it more advantageous to receive the flat grant or minimum guarantee of state support per pupil. Albany, Rochester, and Yonkers already receive state school aid on a flat grant basis. Buffalo is getting very close. Syracuse like New York City is moving in that direction. Under these circumstances, the correction may be of only temporary value to this group of cities. Increases in flat grant assistance may be a more practical solution.

10. Cities with a population of 125,000 or more already are given a correction equal to a 10.0 per cent increase in operating aid, applying also to the flat grant for operating expense ($198 per pupil instead of $180).

Proportion of the State Total of
Certain Resources in Five Cities With a
Population of 125,000 or More

	Percent of State Total			
City	Employed Persons (Resident)	Income Estimated	Retail Sales	Full Valuation of Taxable Property
Albany	0.8%	0.7%	1.1%	0.7%
Buffalo	3.0	2.7	3.8	3.0
Rochester	2.0	1.8	2.7	2.0
Syracuse	1.3	1.2	1.7	1.2
Yonkers	1.2	1.4	1.2	1.2
Total	8.3	7.8	10.5	8.1

Source: U. S. Census data

The foregoing analysis provides little support for use of the Correction Factor in the school support formula. Yet, as in New York City it is difficult to find a rational basis for making a choice between the full valuation figure used in the present state aid formula and the corrected one. Table XIV compares full valuation according to five different population measures. Total population is most favorable to the six largest cities; the existing public school pupil one the least favorable. The measure obtained by using the Correction Factor falls between the two.

Impact in the Other Cities

In New York State, school districts in cities under 125,000 population are fiscally independent with their own separate taxing and borrowing powers. Most of them are not coterminous with the cities. In some such as Rome, Saratoga, and Troy there are more than one school district within the city limits. The more typical pattern is for the school district to extend beyond the corporate limits of the city as in Corning, Ithaca, Niagara Falls, and Schenectady.

In only one of the eight cities over 50,000 and under 125,000 population listed in Table XII does the Correction Factor have an effect comparable to that in the six largest cities. Troy shows the greatest percentage gain in state school support of all of the cities studied - a gain of over 21 per cent. The correction in Troy also would result in the highest per cent of reduction in local tax rate for school support. In the other seven smaller cities the range is from a gain of over 8.0 per cent in state funds for New Rochelle to a loss of 7.0 per cent for Niagara Falls (with a non-coterminous school district), with relatively small changes in the other five.

Troy contains two school districts as noted in Table XI (Troy City School District and a district in the northern part of the city, popularly known as Lansingburg). There is no way of separating the population of the Lansingburg school district from the total population figures for the city.

The census figures on public school enrollment for Troy probably include both districts. However, the Correction Factor computed for the entire city and applied to a part of the city (Troy City School District) may introduce error.

Troy has a much smaller proportion of the full valuation of the state (0.22%) than of other key economic factors such as resident employed labor for (0.4%), estimated income (0.3%), and retail sales (0.46%). On the other hand the city does have a very high proportion of pupils of school age in nonpublic schools and it has been economically depressed for decades, relying heavily on industries employing women. Much of its industrial plant and housing is old and in need of replacement. Any further correction in addition to what is shown above may be questionable.

A reduction in state school support resulting from the correction in Niagara Falls would be serious. The school district (which is larger than the city) recently lost its sales tax revenue provided by the city, and its state support is being reduced due to rising full valuation per pupil. Part of the reduction may be due to the possible error arising from applying the Correction Factor to a noncoterminous city school district. Nevertheless, the city has a higher proportion of the full valuation of the state (0.77%) than it has of other economic indicators - employed residents (0.6%), income (0.6%), and retail sales (0.6%). Under these circumstances it is hard to justify a further increase in its full valuation per pupil by applying the Correction Factor.

The application of the correction to cities under 125,000 presents serious administrative problems. As in the largest cities, population figures are available only once every ten years. The estimates made by the State Health Department on an annual basis have proved to be unreliable for the state as a whole and particularly overestimated for cities. Since city school districts or other school districts in New York State seldom coincide with political boundaries for other governmental units, it is not possible to obtain accurate population figures for school districts outside of cities with 125,000 population or over. This is true for Niagara Falls, Schenectady, and Troy. Furthermore, if any population cutoff is used such as 50,000, there may be school districts with a population in excess of 50,000 which are inadvertently omitted, e.g., the large city school districts of Corning and Ithaca covering large parts of counties, or some of the densely settled suburban school districts adjacent to large cities, such as Kenmore in Erie County and Port Chester in Westchester County. Some of the places with 50,000 population or more found in Census reports may contain part of a school district, parts of several districts, or a whole district and part of one or more others, e.g. Cheektowaga - Northwest, Hicksville, Levittown, and Tonawanda. These places are included in Appendix A, but are excluded from this analysis.

Measurement Problems

The correction is difficult to rationalize because most of the changes which it makes in property valuation per pupil or in state funds per pupil are within the possible margin of error in the original data now used in the school support formula. The correction for cities with a population of 50,000 or more ranges from an increase in full valuation per pupil of 6 per cent in Niagara to a reduction of 22 per cent in the City of Troy. Most (over 60%) of the changes are in the range of -5.0 to +5.0 per cent.

The margin of error in the full valuation per weighted pupil could exceed these percentages for many reasons:

1. Valuation at best is a judgment. There are differences of opinion on what constitutes "true value." Expert appraisers in making original assessments could differ by plus or minus 10 to 20 per cent on assigning a market valuation to property. Many sellers of real property may not realize the highest market price possible, and many buyers may pay more than appraised value.

2. The estimation of full valuation from data on original assessments, sales, and appraisals is based upon sampling which, itself, could add to the possible error when applied to total assessment rolls.
3. Neither the data on relationships of assessed valuation to "market valuation" nor the data on per pupil expenditures from which pupil weightings are derived resemble normal curves of distribution. Often they are flat distributions making the use of any average rather arbitrary in assigning corrections or weights.
4. Weighted pupil measures themselves could add to any error by applying uniform weights to conditions in which a variety of weights actually exist.
5. The use of public school attendance could lead to error as applied to units with varying proportions of pupils attending nonpublic schools.

Considering the wide margin of error possible in full valuation per weighted pupil, it is not possible to make a strong case either for the existing per pupil full valuation measure or for the corrected one. The correction could reduce or it could increase the margin of error in the original data, but there is no basis for knowing which is happening.

Theoretical Questions

The foregoing analysis and certain underlying theoretical questions make me skeptical of the proposed correction as well as one now in effect in in New York State.

The assumption underlying such corrections that both schools and city government are dependent upon the property tax for local taxation does not apply in New York State. All cities and counties have nonproperty taxing powers which may be used for city government and school support. If we assume as we often do for statistical purposes that all local support for schools is derived from property taxes in cities, then the correction, if any, needed for municipal expense is greatly reduced since all local nonproperty taxes are allocated to nonschool purposes. If support of municipal government is impinging upon what can be raised for school support, and if local nonproperty taxes are not being imposed, then the problem is political and not economic or financial.

There are at least three assumptions which can be made as to what the use of full valuation per pupil in a school finance formula really implies:

1. It can be regarded as a way of predicting the yield of a specified local tax rate so that state funds may be used to supplement the local tax yield for purposes of equalization or sharing the school costs among different tax bases. This is the assumption which I prefer. Under it a correction for municipal spending or for municipal sharing of the same tax base as the schools has no meaning unless it tends to correct errors in the basis for predicting the yield of a tax. If such errors exist, there is no evidence that such a correction based upon population factors alone would correct them.

2. It can be treated as a measure of ability to pay the property tax. This is an assumption which I find hard to accept. Equal amounts of property valuation per pupil do not indicate equal ability to raise a property tax because of
   (a) the differing economics of various classes of property;
   (b) the varying proportions of different classes of property on different tax rolls; and
   (c) the varying extent to which taxes on various classes of property can be exported to other jurisdictions.

   If it is applied under this second assumption, the correction could further magnify errors in the determinations of taxpaying ability.

Two city school systems which were exactly alike in the population factors used in the correction and in full valuation per pupil could differ markedly in ability to pay the property tax. In one case ability would be overestimated because the locality, by the nature of its economy, must invest heavily in property to produce a given unit of income and because it is not in a position to shift much of the tax forward to others living outside of the city. In the other case taxpaying ability would be underestimated because very little property investment is essential to produce a given unit of income and because much of the property tax paid can be exported through income flowing through the city. To apply a uniform percentage correction of these two unlike cases would magnify greatly the errors in determining taxable capacity.

3. A third possible assumption is that the capacity of a locality to raise property taxes for school support is reduced if the burden of financing other local government on the same tax base exceeds some norm or dividing line. This apparently is the assumption underlying the correction. Municipal overburden is inferred from the proportion of population not enrolled in public school. A number of questions arise concerning this assumption and the inferences based thereon include the following:
   a. Could not a high proportion of population not in public school be indicative of greater fiscal capacity as well as municipal overburden? Does not the assumption treat gainfully employed with high incomes and dependents with little or no income as if they were alike, each causing an equal amount of municipal overburden? Is it not possible that characteristics of population rather than numbers and percentages may be the greatest determiner of both local governmental and school needs?
   b. In terms of differences in the allocation of local governmental

functions as between cities and counties or authorities, differences in local taxing powers and tax bases, and other variables, is it reasonable to assume a uniform proportion of the property tax base or any other local tax base for school support?

c. All other things being equal, is it reasonable to assume that new, rapidly growing suburban governments having a relatively small proportion of gainfully employed and a relatively high proportion of dependents and children in public school have less need for other governmental services than old, slow growing urban governments having a high proportion of gainfully employed adults, and a relatively low proportion of dependents and children in public school. Could not the high proportion of the local tax base devoted to public school support in the first case be symptomatic of neglect of other essential government services with corresponding increases in required private sector expenditures? Do not many of the municipal services provided by city governments reduce the need for private sector outlays for transportation, recreation, protection, health services, and other things?

The Correction Factor assumes certain theoretical conditions relative to public spending and fiscal capacity regarding which there is a dearth of evidence and conflicting findings.

If large cities possess average or above average fiscal capacity as I suspect, then the major problem of school finance in these cities may be that of increasing local taxing powers, stimulating or requiring greater local effort for school support, increasing state general support for schools, and perhaps obtaining greater economy in outlays for other municipal purposes. The low proportion of municipal revenues allocated for public school support in the large cities of New York State, in face of such serious educational problems as are arising from a changing population, may be symptomatic of a poor sense of values, lack of mechanisms and means for bringing educational issues to the top in municipal budgetary decisions, fiscal restrictions imposed upon local school support by state and local laws, and political pressures for other kinds of local spending. The state may have to tie increased state support for schools to increasing local support for schools rather than to provide local tax relief which may be diverted to the support of other municipal government without improving school finance.

TABLE X

COMPUTATION OF CORRECTION FACTOR FOR NEW YORK CITIES OF 50,000 OR MORE POPULATION

Cities 1	Population 1960 2	Total Pub. Sch. Enrol. 3	Ratio Pop. Over Public Sch. Enrol. 4	% of Total K-12 Enrol. In Pub. Sch. 5	Correction Factor 6
Albany	129,726	14,437	8.99	58%	.81
Binghamton	75,941	12,551	6.05	82	1.01
Buffalo	532,759	68,741	7.75	64	.88
Cheektowaga -					
Mount Vernon	76,010	11,655	6.52	79	.97
New Rochelle	76,812	11,380	6.75	71	.95
New York City	7,783,314	1,005,929	7.74	72	.88
Niagra Falls	102,394	18,760	5.46	80	1.06
Rochester	318,611	39,545	8.06	66	.87
Schenectady	81,682	12,271	6.66	79	.96
Syracuse	216,038	29,023	7.44	71	.90
Troy	67,492	6,927	9.74	50	.78
Utica	100,410	15,597	6.44	77	.98
White Plains	50,485	8,008	6.30	81	.99
Yonkers	190,634	25,276	7.54	66	.90
STATE TOTAL	16,783,604	2,727,540	6.15	78	1.00

Source: Columns 2, 3, and 5 derived from United States Census of Population, 1960 New York: PC(1) 34C, Tables 72 and 73. Column 6 computed from Column 4 as explained in text.

TABLE XI

BASIC DATA FOR COMPARING TAX RATES AND COMPUTING STATE SCHOOL SUPPORT FOR OPERATING EXPENSE IN NEW YORK, CITIES WITH 50,000 OR MORE POPULATION, 1959-1960

City	Assessed Valuation (thousands)		Full Valuation (thousands)		Resident Weighted Average Daily Attendance Used With 1960 Tax Roll
	1959 roll/1	1960 roll/2	1959 roll/1	1960 roll/2	
Albany	$303,987	$307,902	$ 498,339	$ 480,856/3	13,006
Binghamton	132,460	135,576	275,959	294,731	12,831
Buffalo	1,060,270	1,098,920	2,078,960	2,192,682	67,591
Mount Vernon	187,872	190,673	293,550	309,124	11,418
New Rochelle	326,138	335,331	388,259	399,181	11,916
New York City	23,549,007	25,091,963	28,491,689	30,277,400	961,947
Niagara Falls	189,554	194,940	486,037	529,558	18,817
Rochester	664,904	681,497	1,385,216	1,482,336	41,276
Schenectady	177,958	180,633	342,228	357,257	12,250
Syracuse	414,146	427,491	845,197	891,321	28,996
Troy	113,066	113,245	154,885	131,750/4	5,134
Utica	163,423	167,933	297,133	321,829	15,079
White Plains	233,929	238,783	349,148	367,358	8,147
Yonkers	522,314	548,869	816,115	885,229	25,693
STATE	39,473,563	42,053,443	66,923,500	73,331,600	2,743,000

/1 Does not include veterans exempt property.
/2 Includes veterans exempt property.
/3 Adjusted for tax exempt property.
/4 Troy City School District includes only part of City.

TABLE XII

CHANGES IN COMPUTED STATE SCHOOL SUPPORT PER WEIGHTED PUPIL RESULTING FROM THE USE OF CORRECTION FACTOR IN NEW YORK, CITIES WITH 50,000 OR MORE POPULATION, 1959-60

City	Full Valuation Per Resident WADA		School Support Per WADA		Change in Support per WADA	
	Actual[1]	Corrected by Factor[2]	Actual	Corrected	Amount	Percent
Albany	$36,972	$29,947	$180[3]	$213	+ $33	+18.3%
Binghamton	22,970	23,200	280	278	-2	-0.7
Buffalo	32,440	28,547	189	227	+38	+20.1
Mount Vernon	27,073	26,261	241	249	+8	+3.3
New Rochelle	33,500	31,825	180[3]	195	+15	+8.3
New York City	31,475	27,698	199	235	+36	+18.1
Niagara Falls	28,143	29,832	230	214	-16	-7.0
Rochester	35,913	31,244	180[3]	201	+21	+11.7
Schenectady	29,164	27,998	221	232	+11	+5.0
Syracuse	30,739	27,665	206	235	+29	+14.1
Troy	25,662	20,016	254	308	+54	+21.3
Utica	21,343	20,916	296	300	+4	+1.4
White Plains	45,091	44,640	180[3]	180[3]	-	-
Yonkers	34,454	31,009	180[3]	203	+23	+12.8

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[1] Based upon 1960 assessment rolls

[2] Correction factor from Table III, last column

[3] Flat grant or minimum aid for operating expense under the formula

Note: Cities of 125,000 or over (Albany, Buffalo, New York, Rochester, Syracuse, and Yonkers) receive a correction equal to an additional 10% support per WADA for operating purposes under existing law. This is now shown. The formula for determining aid ratios with these data is:

1.000 - (FV/WADA of City X.51)/$26,600

TABLE XIII
IMPACT OF CORRECTION FACTOR UPON THE APPORTIONMENT OF SCHOOL FUNDS IN NEW YORK, CITIES WITH 50,000 OR MORE POPULATION
1959-60

	Tax Rate Per M on Full Valuation/1							Percent of Change in School Tax Rate
City	County	Munici-pal	School	Total	Equivalent of Gain or Loss /3 in State Support	Corrected/4 School	Corrected/4 Total	
Albany	$ 7.55	$13.43	$ 9.51	$30.49	$ -.89	$ 8.62	$29.60	-9.4%
Binghamton	4.88	19.20	11.64	35.73	+0.09	11.73	35.82	+0.8
Buffalo	8.31	17.64	7.66	33.61	-1.17	6.49	32.44	-15.3
Mount Vernon	6.91	19.41	16.87	43.21	-0.30	16.57	42.91	-1.8
New Rochelle	7.57	15.80	16.24	39.62	-0.45	15.79	39.17	-2.8
New York City	-	22.97	14.88/2	37.85	-1.14	13.74	36.71	-7.7
Niagara Falls	6.26	13.69	13.49	33.46	+0.57	14.06	34.03	+4.2
Rochester	7.74	13.50	9.85	31.10	-0.58	9.27	30.52	-5.9
Schenectady	7.28	17.40	16.48	41.17	-0.38	16.10	40.79	-2.3
Syracuse	10.66	12.25	11.73	34.64	-0.94	10.79	33.70	-8.0
Troy	9.97	23.64	14.54	48.16	-2.10	12.44	46.06	-17.9
Utica	11.09	20.12	12.24	43.46	-0.19	12.05	43.27	-1.5
White Plains	6.80	13.29	15.23	35.62	-	15.23	35.62	-
Yonkers	6.51	14.33	12.41	33.27	-0.67	11.74	32.60	-5.4

/1 Based upon 1959 assessment rolls from 1959 Tax Atlas of New York State, Table A. Albany: New York State Department of Audit and Control, 1961.
/2 Assuming the appropriation for schools is from property tax revenues only.
/3 Derived from Table C2.
/4 After adding or subtracting gain or loss.
Note: It is very difficult to compute comparable overlapping county taxes for cities. For this reason available 1959 data are used; similar data for 1960 are not available.

TABLE XIV

COMPARISON OF VARIOUS INDICATORS OF YIELDS OF A TAX ON THE FULL VALUATION OF REAL PROPERTY IN NEW YORK, CITIES WITH 50,000 OR MORE POPULATION, 1959-1960

City	Full Valuation Per Capita/1	Index Number (State Average = 100) of Full Valuation				
		Per Capita/2	Per Dependent/3	Per Child 5-17/2	Actual per WADA/4	Corrected per WADA/4
Albany	$3841	96	100	98	139	113
Binghamton	3634	91	93	90	86	87
Buffalo	3902	98	95	94	122	107
Mount Vernon	3862	97	104	99	102	99
New Rochelle	5055	127	131	116	126	120
New York City	3661	92	97	95	118	104
Niagara Falls	4747	119	116	101	106	112
Rochester	4348	109	112	110	135	117
Schenectady	4190	105	102	106	110	105
Syracuse	3912	98	100	97	116	104
Troy	2295	58	56	54	96	75
Utica	2959	74	72	72	80	79
White Plains	6916	173	193	171	170	168
Yonkers	4281	107	111	102	130	117
STATE	$3988	100	100	100	100	100

/1 On basis of 1959 assessment rolls

/2 Based upon column 1

/3 On basis of total population minus employed civilian labor force from U. S. Census 1960

/4 From Table XII

CHAPTER V

APPLICATION OF THE CORRECTION FACTOR TO APPORTIONMENT OF SCHOOL FUNDS IN CALIFORNIA

with comments by Marvin C. Alkin

The California school support program includes two foundation programs, each of which has its own computational tax rate, and the district selects whichever yields the most equalization money. The equalization aid is computed by subtracting from the foundation program the basic aid, some other revenues, and the amount derived by multiplying the computational tax rate of that foundation program by the locally determined assessed valuation as adjusted by ratios of assessed to true value for each county. Thus, from the point of view of its school support program, California is an excellent state in which to examine the effects of the local tax allocation Correction Factor.

In 1960, California had 15,715,204 residents; 68 per cent of this total population resided in the 354 cities of the state. Moreover, these are not static figures, for this total population represented a 48 per cent increase during that decade. The increase, we might add, took place primarily in the cities and suburbs, a trend which is not uncommon throughout the country. These data serve as an introduction to an understanding of the government complexity which exists in California. Not only did the State have 354 cities in 1960, but in the same year there were 118 "unified" (K-12) school districts, 226 high school districts, and 1,360 elementary school districts.

The main difficulty in examining and comparing school and city data stems not so much from the large number of such governmental units, as from the lack of coterminality of their boundaries. This problem may be traced to the fantastic growth of the state, coupled with the political effects of this growth on the existing governmental units. The population increases in the state, primarily in previously unincorporated, sparsely populated land, spurred the cities into an active policy of annexation. This, in turn, changed the boundaries of the school districts associated with these cities. As municipalities continued their annexation practices, school districts servicing the unincorporated areas faced the prospect of a continuing change in their boundaries and a decline in their number of students. These difficulties and various other political questions led to legislation stabilizing school district boundaries. Many of the present city school districts have as their boundaries the limits of the city at the time of the stabilizing legislation (about ten years ago). The cities of California, however, have continued the practice of annexing new land. Thus, in many municipal areas the school district of a city is in reality only its central core. Other instances can be cited, however, where school districts are geographically inclusive of cities. It is clear and readily observable in California that there is a general lack of coterminality of school districts with municipalities, counties, or other special districts.

The lack of coterminality would offer operational difficulties if the Correction Factor were incorporated into the California foundation program. However, the discussion at this time is primarily concerned with examining the application of the formula to California and not with developing a plan for its implementation. Under these conditions, it is possible to proceed with an analysis. By considering the counties and cities of the state as the basic units of investigation, U.S. Census data is available which yields the total population and the number of pupils in public schools and in private schools who resided in that county or city in April 1960. Correction Factors computed for large cities and for counties are assumed to be valid estimates for school districts associated with them.

The data presented in Table XV is for the 58 counties of California. The mean Correction Factor for the counties is of course 1.00, the state total. The range of the factors are from .76 in San Francisco to 1.21 in Amador County. A Correction Factor of less than 1 would result in an increase in state aid under this plan, and a factor greater than 1 would be associated with a decrease in state aid. For San Francisco, the low factor is quite understandable. Not only is this city a highly urban area with a large ratio of total population to school age children but also it has 24 per cent of its K-12 pupils in private schools compared to a state average of 10 per cent.

Of particular significance in the California application is the wide range of the Correction Factors for the counties. Although at this time there is no county-wide property tax for schools in California, proposals for such taxation are being considered by legislators and citizens alike. If a county-wide tax plan should be adopted, there would be fewer problems in the implementation of the Correction Factor than are presently posed by the maze of overlapping governmental boundaries. Moreover, if county-wide property taxation is used for school support, the present data indicates a need for considering the use of the Correction Factor for equalization of differences between counties on one dimension of their ability to support educational programs.

Table XVI further accents the need for consideration of the Correction Factor in determining a county's ability to support public education. Sizeable differences are noted between the amount of valuation per capita and per public elementary school child when each is expressed as a per cent of the state average. If, as in the state school support program, only the valuation per public school child in average daily attendance is examined, then San Francisco County has a valuation (based on elementary school children in ADA) of 172 per cent of the state average. Thus, for purposes of the state school foundation program, the school district of San Francisco County would be considered as "wealthy." For purposes of providing municipal services, however, the valuation of that county on a per capita basis is only at the state average. Alameda and Los Angeles counties also suffer overestimates of wealth. Alameda's valuation per elementary school children ADA is 4 percentage points lower than its valuation per capita. For Los Angeles, the difference is 9 percentage points.

On the other end of the continuum, Contra Costa, Fresno, and Kern Counties each has a valuation per elementary school child in ADA about 26 percentage points lower than its valuation per capita. Thus, each receives greater state support under the present foundation program than if the Correction Factor were applied.

The wide differences noted in counties is also found in the large cities (Table XVII). The cities with a population of 50,000 or more range in their ratio of N/A from 3.59 in Lakewood to 8.11 in Santa Monica. These ratios lead to Correction Factors of 1.15 and .75 in Lakewood and Santa Monica respectively. A better understanding of the meaning of these figures is obtained by examining the components of the Correction Factor.

The local tax allocation Correction Factor is determined by several elements. In view of the likelihood that communities which have a larger per cent of adult population may have greater demands for non-school public services, one element which determines the factor is the ratio of adults to total population. That is, the formula seeks to recognize and correct for one of the complex set of social forces which exerts its economic demands on expenditures. These demands may be for private as opposed to public services, or as in the present instance, they may represent a postulated increased need in one part of the public sector of the economy. The purpose of the factor is to take into consideration these increased needs.

The private school enrollment is a second determinant of the Correction Factor. A gain in private school enrollment increases the ratio of total population to public school enrollment and decreases the local tax allocation Correction Factor. Thus, such an increase would have a similar effect on the ratio and the factor as would an increase in the per cent of adult population.

The per cent of school age children not enrolled in school might be another determinant factor. Intangibles such as the accuracy of the enrollment reports, and of the possible errors introduced by using ADA instead of other enrollment measures might also be considered as potential determinants of the factor.

We wish to examine what portion of the Correction Factor may be attributed to the second of the determinants noted above. That is, we seek to ascertain the portion of the variance in the factor that can be explained by the variable, per cent of school children enrolled in private schools. It will be noted that the ratio of N/A is merely a monotonic transformation of the Correction Factor. Thus, for convenience we may examine N/A instead of the factor, a process which will yield comparable statistical results.

Using the data for California cities with populations of 50,000 or more, a Pearson Product-Moment Correlation was computed between the per cent of school children enrolled in private schools as an independent variable and N/A as a dependent variable. The correlation between the variables noted was $r = .61$ (significant at $p = .002$).[1] The coefficient of determination is .37 which is the square of the correlation. Thus, although the relationship is quite significant, in California only 37 per cent of the variation in the ratio is explained by this determinant. The rest, or unexplained portion of the variation, must be attributed to other factors.

Thus, a substantial portion of the difference in Correction Factors between cities such as Lakewood and Santa Monica cited above, may be attributed to other determinants such as the burden of municipal expenditures brought about by a large ratio of total population to school age children. It is reasonable to say that, in California, the effect of the private school enrollment does not obscure municipal service requirements effects on the N/A ratio and the Correction Factor.

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[1] Significance was established using the formula $r/\sigma_r = r\sqrt{N-1}$ which has approximately the unit normal distribution. See Helen M. Walker and Joseph Lev, Statistical Inference, New York; Henry Holt and Company, 1953, p. 252.

Additional insights are gained by the computation of the means of the column data in Table XVII. The summary of these means and their comparison to state totals are found below:

	Population	Total Pub. Sch. Enrol.	Ratio Pop. over Public Sch. Enrol.	% of Total K-12 Enrol. in Pub.Sch.	Correction Factor
	2	3	4	5	6
State Total	15,720,860	3,256,081	4.83	90	1.00
Cities of 50,000 or more population (Totals)	7,728,278	1,424,289	5.43	88	.94*

* Computed from Column 4 of Table XVII as explained in the text.

The 7,728,278 persons in cities with population of 50,000 or more in 1960 constituted 49.2 per cent of the state total. At the same time only 43.7 per cent of the total public school enrollment was to be found in these cities. This is indication of the fact that a higher ratio of N/A exists in the large cities. Indeed, this is the case; the ratio is 5.43 compared to a state average of 4.83. The difference between the ratio for the large cities and for the state is expressed as a local tax allocation Correction Factor of .94 for large cities, compared to a state computational mean of 1.00.

This, however, is not the total picture. Because of the great variance in size among the cities greater than 50,000 in population, a further analysis was necessary. The population mean for cities of the group which had a Correction Factor less than or equal to one was computed. This is the group, which we will refer to as "favored" cities as none of them would receive a decrease in state aid if the factor were incorporated into the foundation program. A population mean was computed also for the group of "unfavored" cities. The mean population of the favored cities was 3-1/2 times that of the unfavored cities. This analysis is summarized below:

	Favored (C.F. $\leq$ 1)	Unfavored (C.F. $>$ 1)
Cities of 50,000 Population or over, Los Angeles included	298,713 (N = 20)	76,261 (N = 23)
Cities of 50,000 Population or over, Los Angeles deleted	183,832 (N = 19)	76,261 (N = 23)

One might argue at this point that the large size of a city like Los Angeles (approximately 6,000,000 people) is what accounts for the great disproportion between the mean populations of the favored and unfavored cities. If Los Angeles is deleted from the group of favored cities and the data are recomputed, the mean population size differential is still almost 110,000 persons. Thus, it is apparent that the cities, and especially the large cities, would benefit financially from the utilization of the Correction Factor in state aid programs.

It should be noted at this point that with the discussion of the material in Tables XVIII-XXII we hazard into the somewhat shaky ground of the coterminality problem. The data of these tables only offers validity for the geographic area which is within both the city and the school district. When the city is quite large, however, the area not common to both city and school district is relatively small by comparison. Thus, for the large governmental units under investigation in this study, it is reasonable to assume validity of the data.

The effect of using the Correction Factor to adjust the local valuation per ADA for state foundation computation purposes is shown in Table XVIII. The range of the equalized valuations in the selected districts of the state is from $4,993 to $29,053 per elementary school child in average daily attendance. Thus, it is apparent that increases or decreases of 10 per cent or 20 per cent to obtain the adjusted valuation do not represent drastic shifts in the order of the districts when they are placed according to their valuations per pupil. The point that is to be made and which will be reiterated by the data of the following paragraphs is that the use of the Correction Factor does not lead to great changes in the computational valuations of school districts or to large increases in the state aid of these districts. It does account, however, for some shifting of the financial burden and for small assistance to selected districts.

In Table XIX we have examined the change in state aid per elementary school child in average daily attendance which would result from the inclusion of the Correction Factor in the computation of the state support formula for school districts. The greatest increase is $20 per elementary school child in ADA in San Francisco and Alhambra. A decrease of $15 in Hayward would be the largest loss for any of the districts.

When the increases and reductions are converted to tax rate equivalents, some of the districts with smaller dollar amounts but low valuations show up with the most marked tax rate changes. In Alameda, the use of the Correction Factor would provide additional state funds equivalent to the yield of a local tax rate of 14 cents per $100 of equalized valuation. Alhambra with an 11 cent equivalent increase and Pasadena and San Francisco at 10 cents each, are other districts which would benefit substantially.

Highest equivalent decreases in local tax rate are found in Norwalk-La Mirada, West Covina, Garden Grove and Hayward. These districts would lose state aid payments in an amount equivalent to the yield of a tax rate of 18 or 20 cents per $100 of equalized valuation.

An important relationship is suggested by some of the data of Table XIX. The data show that districts that would be receiving only the flat grant of $125 per child in average daily attendance are those which have high demand for municipal allocations as evidenced by a low Correction Factor. Furthermore, none of these districts would receive a decrease in its state aid when the Correction Factor is applied. The fact that several of these so-called "wealthy" districts would evidence no change from the flat grant which they normally receive is primarily a function of the flat grant program which maintains an artificial minimum state contribution. It is evident that the Correction Factor has, in many cases, a similar effect to the flat grant provision. That is, it provides additional funds for some of the districts defined as "wealthy" by the California state support program. Since the effect of the Correction Factor is depressed by the flat grant, it is worthwhile to consider the California program without this provision.

In Table XX, the deletion of the flat grant is assumed and an examination is made of the effects of the C.F. on the five districts which presently receive only these grants. When the Correction Factor is applied, three of the five would be eligible for funds from the state school foundation program in an amount in excess of the flat grant. The amount of state aid received by the two remaining districts would be less than $30 per pupil from the flat grant figure. In all five cases the size of the increase in funds when the Correction Factor is applied would be greater than if there were no flat grant provision.

The tax rates for city governments and for public schools in California cities of 50,000 or more population in the 1960 census are shown in Table XXI. The various columns of the table are steps in the computation of the state equalized combined tax rate. While the range from highest to lowest in school district tax rates is less than 2 to 1, the range in city tax rates is greater than 10 to 1. Thus, while a measure of equalization of school tax rates has taken place, the varying burdens of municipal government apparently have been ignored.

An effort was made to determine whether application of the Correction Factor to the state foundation program and the resulting local adjustment to accommodate the increase or decrease in state aid would have any effect on the variability of the combined local tax rate. This question was examined using the data of Table XXII. Assuming that an educational program of the same cost was maintained, local tax rates were adjusted to offset increases or decreases in state aid resulting from application of the Correction Factor. The combined local tax rates were computed both for the present foundation program and for the hypothetical program without flat grant. The mean tax rate before correction and after correction in each of the two programs was approximately the same (4.66 and 4.65 respectively). The ranges, however, differed as shown below:

State Equalized Combined Local Tax Rate	Mean	Range	Standard Deviation	Middle 2/3 of Districts (app.)	No. of Dists within	
					25¢ of Mean	50¢ of Mean
Before C. F. Present Program	4.66	3.04-8.72	1.12	4.54-5.78	9	11
After C. F. Present Program	4.65	3.07-8.62				
After C. F. No Flat Grant	4.65	3.07-8.52	1.05	4.60-5.70	9	17

Practically all measures used for analysis showed a decrease in the variability of districts in their combined local tax rate after application of the Correction Factor. However, in view of the fact that the decreases noted were relatively small, it would be necessary to test other samples or to review this data with some of the confounding factors eliminated, to determine how persistent this tendency would be.

Findings

(1) The data reveal that there are differences between counties in their Correction Factors. This is an indication of inequity on a dimension of ability to support education in the counties of California.

(2) Notable differences were found between the valuation per elementary school ADA and the valuation per capita in several counties. This substantiated the above finding.

(3) It is apparent from the data that cities of 50,000 population or more, and especially the larger cities of this group, would benefit from the inclusion of the Correction Factor in the state foundation program.

(4) In terms of the wide spread of differences in equalized valuation of taxable property per child in ADA, it appears that adjustments of the computational valuation, using the Correction Factor, will account for only relatively minor changes in state aid. This may be due, in part, to a number of relationships which lead to an understatement of the effect of the Correction Factor.

(5) The flat grant provision appears to aid many of the same districts as would be assisted by Correction Factor adjustments in state aid. This may lead us to question the feasibility of basing the wealth of a district solely on its valuation per child in ADA.

(6) A decrease in the variability of the combined local tax rate of school districts was noted. Additional investigation is required to determine whether this tendency is significant.

(7) A number of variables have been noted which appear to be determinants of the Correction Factor. The total population per school age child, the per cent of the school children enrolled in private schools, the per cent of school age children not enrolled in school, and attendance reporting all seem to have an effect on the factor. Some of these relationships could be examined with the Correction Factor,

using a multivariate statistical technique which would allow the effect of each to be shown while others are held constant.

(8) The lack of coterminality of school districts with municipalities in California has forced the use of data which confounds the effect of the Correction Factor. The possibility of collecting data on the coterminality of selected cities and their school districts and then utilizing that data to determine exact Correction Factors would offer promise. With the coterminality thus established by census tracts, the relationship of the Correction Factor to various socio-economic characteristics could be observed. In addition, an exact tax rate could be determined by prorating the taxes of the various governmental units in the census tracts.

TABLE XV

COMPUTATION OF CORRECTION FACTOR FOR CALIFORNIA COUNTIES

County 1	Population 1960 2	Total Public School Enrol. 1960 3	Ratio Pop. To Pub. School Enrollment 4	% Of Total K-12 Enrol. In Pub. Sch. 5	Correction Factor 6
Alameda	908,209	179,048	5.07	91%	.98
Alpine	397	54	7.35	100	.79
Amador	9,990	3,163	3.16	100	1.21
Butte	82,030	18,796	4.36	96	1.05
Calaveras	10,289	2,150	4.79	92	1.01
Colusa	12,075	2,865	4.21	92	1.07
Contra Costa	409,030	106,924	3.83	96	1.12
Del Norte	17,771	4,319	4.11	94	1.08
El Dorado	29,390	6,991	4.20	99	1.07
Fresno	365,945	90,834	4.03	95	1.09
Glenn	17,245	4,326	3.99	99	1.09
Humboldt	104,892	25,244	4.16	95	1.08
Imperial	72,105	17,332	4.16	95	1.08
Inyo	11,684	2,867	4.08	99	1.09
Kern	291,984	75,269	3.88	95	1.11
Kings	49,954	13,360	3.74	95	1.13
Lake	13,786	2,705	5.10	98	.97
Lassen	13,597	3,469	3.92	100	1.10
Los Angeles	6,042,431	1,158,941	5.21	88	.96
Madera	40,468	10,808	3.74	97	1.13
Marin	146,820	29,417	4.99	86	.99
Mariposa	5,064	912	5.55	98	.93
Mendocino	51,059	11,849	4.31	94	1.06

TABLE XV - CALIFORNIA
(Page 2)

County 1	Population 1960 2	Total Public Schcol Enrol. 1960 3	Ratio Pop. To Pub. School Enrollment 4	% Of Total K-12 Enrol. In Pub. Sch. 5	Correction Factor 6
Merced	90,446	21,793	4.15	93%	1.08
Modoc	8,308	2,014	4.13	100	1.08
Mono	2,213	413	5.36	99	.95
Monterey	198,351	39,789	4.99	93	.99
Napa	65,890	12,693	5.19	90	.97
Nevada	20,911	4,584	4.56	96	1.03
Orange	7[illegible]3,925	165,509	4.25	92	1.06
Placer	56,998	13,395	4.26	98	1.06
Plumas	11,620	2,926	3.97	100	1.10
Riverside	306,191	67,489	4.54	93	1.03
Sacramento	502,778	113,596	4.43	92	1.04
San Benito	15,396	3,447	4.47	86	1.04
San Bernardino	503,591	115,704	4.35	93	1.05
San Diego	1,033,011	211,189	4.89	92	1.00
San Francisco	740,316	93,258	7.94	76	.76
San Joaquin	249,989	55,124	4.54	91	1.03
San Luis Obispo	81,044	16,694	4.85	95	1.00
San Mateo	444,384	95,052	4.68	88	1.02
Santa Barbara	168,962	33,892	4.99	90	.99
Santa Clara	642,315	147,369	4.36	93	1.05
Santa Cruz	84,219	16,133	5.22	93	.96
Shasta	59,468	15,249	3.90	98	1.10
Sierra	2,247	537	4.18	99	1.07
Siskiyou	32,885	8,178	4.02	100	1.09

TABLE XV - CALIFORNIA
(Page 3)

County 1	Population 1960 2	Total Public School Enrol. 1960 3	Ratio Pop. To Pub. School Enrollment 4	% Of Total K-12 Enrol. In Pub. Sch. 5	Correction Factor 6
Solano	134,596	29,906	4.50	95%	1.04
Sonoma	147,375	31,418	4.69	92	1.02
Stanislaus	157,294	37,839	4.16	97	1.08
Sutter	33,380	8,442	3.95	95	1.10
Tehama	25,305	6,546	3.87	98	1.11
Trinity	9,706	2,295	4.23	100	1.06
Tulare	168,403	42,461	3.97	97	1.10
Tuolumne	14,404	3,308	4.35	100	1.05
Ventura	199,138	43,371	4.59	91	1.03
Yolo	65,727	14,936	4.40	93	1.05
Yuba	33,859	7,894	4.29	94	1.06
State Total	15,720,860	3,256,081	4.83	90	1.00

Source: Columns 2, 3, and 5 derived from United States Census of Population 1960, California: PC(1) 6C Tables 82 and 83. Column 6 computed from column 4, as explained in text.

TABLE XVI

Ratio of Assessed Valuation to Population and Elementary (K-8) ADA for Selected California Counties, 1959-1960

County 1	Population April 1, 1960 2	ADA 1959-1960 K-8 3	Assessed Valuation In $1,000's 1959-1960 4	VALUATION PER CAPITA		VALUATION PER ELEMENTARY ADA	
				Amount 5	% Of State Av. 6	Amount 7	% of State Av 8
Alameda	908,209	133,266	$ 1,340,897	$1,476	84%	$10,062	88%
Contra Costa	409,030	80,331	837,415	2,047	117	10,425	91
Fresno	365,945	70,459	838,564	2,292	131	11,901	104
Kern	291,984	54,837	706,149	2,418	138	12,877	112
Los Angeles	6,038,771	850,649	10,912,311	1,807	103	12,828	112
Orange	703,925	122,384	1,180,952	1,678	96	9,650	84
Riverside	306,191	48,116	514,581	1,681	96	10,695	93
Sacramento	502,778	84,743	614,938	1,223	70	7,256	63
San Bernardino	503,591	84,578	855,461	1,699	97	10,114	88
San Diego	1,033,011	157,038	1,261,086	1,221	70	8,030	70
San Francisco	740,316	65,587	1,293,615	1,747	100	19,724	172
San Joaquin	249,989	41,243	430,263	1,721	98	10,432	91
San Mateo	444,387	71,987	830,640	1,869	107	11,539	101
Santa Barbara	168,962	24,756	376,014	2,225	127	15,189	133
Santa Clara	642,315	111,513	1,065,169	1,658	95	9,552	83
Solano	134,597	22,317	164,432	1,222	70	7,368	64
STATE TOTAL	15,720,860	2,401,027	27,509,506	1,750	100	11,457	100

Sources: Column 2, U. S. Census; Columns 3 and 4, California State Department of Education, Apportionment of the State School Fund, Nov., 1960. (Column 4 includes Collier Factor Adjustment.)

TABLE XVII

Computation of Correction Factor For California Cities of 50,000 or More Population

Cities 1	Population 1960 2	Total Pub. Sch. Enrol. 3	Ratio Pop. Over Public Sch. Enrol. 4	% of Total K-12 Enrol. In Pub. Sch. 5	Correction Factor 6
Alameda	63,855	10,734	5.95	91%	.90
Alhambra	54,807	7,651	7.16	77	.81
Anaheim	104,184	25,644	4.06	92	1.09
Arden Arcade	73,352	18,541	3.96	88	1.10
Bakersfield	56,848	13,281	4.28	92	1.06
Berkeley	111,268	16,989	6.55	92	.85
Burbank	90,155	16,759	5.38	86	.95
Compton	71,812	17,642	4.07	93	1.09
Downey	82,505	19,273	4.28	88	1.06
E. Los Angeles	104,270	21, 992	4.74	87	1.01
Fresno	133,929	29,152	4.60	94	1.03
Fullerton	56,180	14,652	3.83	94	1.12
Garden Grove	84,238	22,771	3.70	93	1.13
Glendale	119,442	18,004	6.63	87	.84
Hayward	72,700	19,558	3.72	96	1.13
Inglewood	63,390	8,963	7.07	82	.81
Lakewood	67,126	18,698	3.59	89	1.15
Long Beach	344,153	56,017	6.14	88	.88
Los Angeles	2,481,456	429,578	5.78	86	.91
Norwalk	88,739	24,399	3.64	93	1.14
Oakland	367,548	60,460	6.08	87	.89
Palo Alto	52,287	12,270	4.26	92	1.06
Pasadena	116,407	17,126	6.80	83	.83
Pomona	67,157	14,478	4.64	88	1.02

TABLE XVII
(Page 2)

Cities	Population 1960	Total Pub. Sch. Enrol.	Ratio Pop. Over Public Sch. Enrol.	% of Total K-12 Enrol. In Pub. Sch.	Correction Factor
Richmond	71,854	17,014	4.22	95%	1.07
Riverside	84,332	19,708	4.28	91	1.60
Sacramento	191,667	35,755	5.36	89	.95
San Bernardino	91,922	20,311	4.53	91	1.03
San Diego	573,224	105,957	5.41	90	.94
San Francisco	740,316	93,258	7.94	76	.76
San Jose	204,196	41,501	4.92	93	.99
San Leandro	65,962	15,672	4.21	96	1.07
San Mateo	69,870	14,391	4.86	86	1.00
Santa Ana	100,350	20,444	4.91	89	.99
Santa Barbara	58,768	10,057	5.84	87	.91
Santa Clara	58,880	13,569	4.34	93	1.05
Santa Monica	83,249	10,260	8.11	84	.75
South Gate	53,831	8,366	6.43	86	.86
Stockton	86,321	17,268	5.00	91	.98
Sunnyvale	52,898	13,545	3.91	96	1.11
Torrance	100,991	25,467	3.97	88	1.10
Vallejo	60,877	13,431	4.53	93	1.03
West Covina	50,962	13,683	3.72	88	1.13
State Total	15,720,860	3,256,081	4.83	90	1.00

Source: Columns 2, 3, and 5 derived from United States Census of Population, 1960 California: PC(1) 6C, Tables 72 and 73. Column 6 computed from Column 4 as explained in text.

TABLE XVIII

Valuation Per Elementary School ADA Adjusted by Correction Factor for California Cities of 50,000 or more Population, 1959-60

School Districts 1	Equalized Assessed Valuation 2	Correction Factor 3	Adjusted Assessed Valuation 4	Elem. ADA(K-8) 1959-1960 5	Equalized Valuation Per ADA 6	Adjusted Valuation Per ADA 7
Alameda	$ 57,894,826	.896	$ 51,873,764	7,508	$ 7,711	$ 6,909
Alhambra	122,684,960	.806	98,884,078	6,677	18,374	14,810
Anaheim	140,777,762	1.086	152,884,650	15,690	8,972	9,744
Bakersfield	123,915,575	1.060	131,350,509	22,016	5,628	5,966
Berkeley	154,073,783	.849	130,808,642	11,337	13,590	11,538
Burbank	277,136,240	.946	262,170,883	11,494	24,111	22,809
Compton	112,874,510	1.085	122,468,843	17,675	6,386	6,929
Downey	54,469,240	1.060	57,737,394	3,731	14,599	15,475
Fresno	260,836,345	1.025	270,432,254	31,562	8,264	8,568
Fullerton	105,314,438	1.115	117,425,598	11,028	9,550	10,648
Garden Grove	79,622,284	1.133	90,212,048	15,849	5,024	5,692
Glendale	233,226,590	.843	196,610,015	14,747	15,815	13,332
Hayward	68,754,472	1.130	77,692,553	8,065	8,525	9,633
Inglewood	134,311,640	.812	109,061,052	6,813	19,794	16,008
Long Beach	731,220,440	.881	644,205,208	52,237	13,998	12,332
Los Angeles	5,411,778,100	.911	4,930,129,849	375,414	14,415	13,133
Norwalk-La Mirada	102,684,910	1.140	117,060 797	10,567	4,993	5,692
Oakland	606,355,980	.885	536,625,042	44,652	13,580	12,018
Palo Alto	129,027,942	1.063	137,156,702	9,986	12,921	13,735
Pasadena	325,522,980	.831	270,509,596	18,745	17,366	14,431
Pomona	107,171,410	1.020	109,314,838	18,745	17,366	14,431
Richmond	207,890,440	1.067	221,819,099	16,488	12,609	13,453
Riverside	122,116,832	1.060	129,443,842	14,154	8,628	9,145

TABLE XVIII
(Page 2)

School Districts 1	Equalized Assessed Valuation 2	Correction Factor 3	Adjusted Assessed Valuation 4	Elem. ADA(K-8) 1959-1960 5	Equalized Valuation Per ADA 6	Adjusted Valuation Per ADA 7
Sacramento	332,080,546	.948	314,812,358	30,953	10,729	10,171
San Bernardino	158,120,308	1.032	163,180,158	20,968	7,541	7,782
San Diego	726,176,661	.943	684,784,591	75,975	9,558	9,013
San Francisco	1,293,614,582	.756	977,972,624	65,587	19,724	14,911
San Jose	245,347,469	.991	243,139,342	16,700	14,691	14,559
San Leandro	107,827,931	1.068	115,160,230	7,857	12,724	14,657
San Mateo	140,283,549	.997	139,872,698	11,551	12,145	12,108
Santa Ana	140,085,395	.992	128,964,712	13,372	10,476	10,392
Santa Barbara	108,464,325	.905	98,160,214	7,184	15,098	13,664
Santa Clara	49,948,118	1.053	52,595,368	3,769	13,252	13,955
Santa Monica	222,343,370	.747	166,090,497	7,653	29,053	21,703
Stockton	180,289,520	.983	177,224,598	20,926	8,616	8,469
Sunnyvale	76,381,661	1.105	84,401,735	8,422	9,069	10,022
Torrance	194,376,320	1.098	213,425,199	20,486	9,488	10,418
Vallejo	63,933,600	1.032	65,979,475	10,942	5,843	6,030
West Covina	35,411,410	1.133	40,121,128	5,965	5,937	6,726

Source: Columns 2 and 5 from Apportionment of State School Fund, 1960, California State Department of Education.

Column 3 from Table XVII, California.

Equalized Assessed Valuation in Column 2 includes Collier Factor Adjustment.

South Gate was deleted from the table as there was no school district of that name.

TABLE XIX

Impact of Correction Factor upon the Apportionment of School Funds in California Cities of 50,000 or More Population, Elementary Schools, 1959-60

	VALUATION PER ADA		STATE AID PER ADA		INCREASE OR REDUCTION IN STATE AID	
School District 1	Equalized 2	Adjusted 3	Actual 4	Adjusted 5	Amount Per ADA 6	Tax Rate Equivalent Per $100 7
Alameda	7,711	6,909	205	216	+$11	+$.14
Alhambra	18,374	14,810	125	145	+ 20	+ .11
Anaheim	8,972	9,744	188	178	- 10	- .11
Bakersfield	5,628	5,966	233	228	- 5	- .09
Berkeley	13,590	11,538	152	165	+ 13	+ .09
Burbank	24,111	22,809	125	125	——	——
Compton	6,386	6,929	223	215	- 8	- .13
Downey	14,599	15,475	146	141	- 5	- .03
Fresno	8,264	8,568	197	193	- 4	- .05
Fullerton	9,550	10,648	180	170	- 10	- .10
Garden Grove	5,024	5,692	241	232	- 9	- .18
Glendale	15,815	13,332	139	154	+ 15	+ .09
Hayward	8,525	9,633	194	179	- 15	- .18
Inglewood	19,714	16,008	125	138	+ 13	+ .07
Long Beach	13,998	12,332	150	160	+ 10	+ .07
Los Angeles	14,415	13,133	148	155	+ 7	+ .05
Norwalk-La Mirada	4,993	5,692	242	232	- 10	- .20
Oakland	13,580	12,018	153	162	+ 9	+ .07
Palo Alto	12,921	13,735	156	152	- 4	- .03
Pasadena	17,366	14,431	130	147	+ 17	+ .10
Pomona	9,850	10,047	176	174	- 2	- .02
Richmond	12,609	13,453	168	163	- 5	- .04
Riverside	8,628	9,245	193	186	- 7	- .08

TABLE XIX (Cont.)

School District 1	VALUATION WITH ADA Equalized 2	Adjusted 3	STATE AID PER ADA Actual 4	Adjusted 5	INCREASE OR REDUCTION IN STATE AID Amount Per ADA 6	Tax Rate Equivalent Per $100 7
Sacramento	10,729	10,171	170	173	+ 3	+ .03
San Bernardino	7,541	7,782	207	204	- 3	- .04
San Diego	9,558	9,013	180	187	+ 7	+ .08
San Francisco	19,724	14,911	125	145	+ 20	+ .10
San Jose	14,691	14,559	146	147	+ 1	+ .01
San Leandro	13,724	14,657	152	146	- 6	- .04
San Mateo	12,145	12,108	161	161	___	___
Santa Ana	10,476	10,392	171	172	+ 1	+ .01
Santa Barbara	15,098	13,664	143	152	+ 9	+ .06
Santa Clara	13,252	13,955	154	150	- 4	- .03
Santa Monica	29,053	21,703	125	125	___	___
Stockton	8,616	8,469	193	195	+ 2	+ .02
Sunnyvale	9,069	10,022	187	174	- 13	- .14
Torrance	9,488	10,418	181	171	- 10	- .11
Vallejo	5,843	6,030	230	22[illegible]	- 2	- .03
West Covina	5,937	6,726	229	218	- 11	- .19

SOURCE: Columns 2 and 3: Table IV-California Assessed Valuation Per Elementary ADA Before and After Adjustment for Population Correction Factor
Columns 4 and 5: Based on Foundation Program Rates for Elementary Schools, 1959-60.

TABLE XX

Impact of Correction Factor Upon the Apportionment of School Funds in Selected California Cities When Flat Grant is Deleted, 1959-60

	VALUATION PER ADA		STATE AID PER ADA		INCREASE OR REDUCTION IN STATE AID	
School District 1	Equalized 2	Adjusted 3	Actual 4	Adjusted 5	Amount Per ADA 6	Tax Rate Equivalent Per $100 Equalized Valuation 7
Alhambra	18,374	14,810	124	145	+21	+.11
Burbank	24,111	22,809	89	97	+ 8	+.03
Inglewood	19,714	16,008	116	138	+22	+.11
San Francisco	19,724	14,911	116	145	+29	+.15
Santa Monica	29,053	21,703	60	104	+44	+.15

Source: (Same as Table XIX)

TABLE XXI

Tax Rates for City Government and Public Schools in California Cities of 50,000 or More Population, 1960

City and School District 1	City Tax Rate 1959-1960 2	Ratio City Assessment to County Assessment 3	County Equalized City Tax Rate 4	School District Tax Rate 5	City and School Tax Rate 6	Collier Factor 7	State Equalized Combined Tax Rate 8
Alameda	2.440	.96	2.340	3.380	5.720	.98	5.837
Alhambra	1.540	1.00	1.540	3.162	4.702	1.00	4.702
Anaheim	1.100	1.00	1.100	2.553	3.653	1.05	3.479
Bakersfield	1.715	1.86	3.190	3.600[1]	6.790	.98	6.929
Berkeley	2.240	1.06	2.374	2.720	5.094	.98	5.198
Burbank	1.480	1.00	1.480	2.135	3.165	1.00	3.615
Compton	.969	1.00	.969	2.834	3.803	1.00	3.803
Downey	.290	1.00	.290	2.749	3.039	1.00	3.039
Fresno	2.936	1.00	2.936	2.754[1]	5.690	1.10	5.173
Fullerton	1.640	1.00	1.640	2.741	4.381	1.05	4.172
Garden Grove	.870	1.00	.870	2.394	3.264	1.05	3.109
Glendale	1.170	1.00	1.170	2.667[1]	3.837	1.00	3.837
Hayward	2.200	1.00	2.200	3.630	5.830	.98	5.949
Inglewood	1.205	1.00	1.205	2.723	3.928	1.00	3.928
Long Beach	1.370	1.08	1.480	2.839[1]	4.319	1.00	4.319
Los Angeles	1.957	1.00	1.957	2.550	4.507	1.00	4.507
Norwalk-La Mirada[3]							
Oakland	2.910	1.00	2.910	3.385[1]	6.295	.98	6.423
Palo Alto	.750	1.13	.848	3.667	4.515	.98	4.607
Pasadena	1.040	1.37	1.425	2.956	4.381	1.00	4.381
Pomona	1.765	1.00	1.765	2.444	4.209	1.00	4.209
Richmond	2.440	1.03	2.513	3.204	5.717	1.08	5.294
Riverside	.980	1.00	.980	2.517	3.497	.85	4.114

TABLE XXI
(page 2)

City and School District 1	City Tax Rate 1959-1960 2	Ratio City Assessment to County Assessment 3	County Equalized City Tax Rate 4	School District Tax Rate 5	City and School Tax Rate 6	Collier Factor 7	State Equalized Combined Tax Rate 8
Sacramento	1.490	1.29	1.922	3.060[1]	4.982	1.05	4.745
San Bernardino	1.349	1.00	1.349	3.630	4.979	1.05	4.742
San Diego	1.800	1.00	1.800	2.444[1]	4.244	.92	4.613
San Francisco	6.016[2]	1.00	6.016[2]	2.007[1]	8.023	.92	8.721
San Jose	1.706	1.00	1.706	2.962[1]	4.668	.98	4.763
San Leandro	1.220	1.00	1.220	2.920	4.140	.98	4.224
San Mateo	1.477	1.46	2.156	3.777	5.933	1.11	5.345
Santa Ana	1.440	1.00	1.440	2.348	3.788	1.05	3.608
Santa Barbara	1.260	1.28	1.613	3.248[1]	4.861	1.15	4.227
Santa Clara	1.548	1.00	1.548	2.948	4.496	.98	4.588
Santa Monica	1.550	1.00	1.550	2.176[1]	3.726	1.00	3.726
Stockton	2.532	1.00	2.532	2.990[1]	5.522	1.06	5.209
Sunnyvale[3]							
Torrance	1.288	1.00	1.288	2.574	3.862	1.00	3.862
Vallejo	1.470	1.00	1.470	3.290[1]	4.760	1.00	4.760
West Covina[3]							

Source: Column 2: Annual Report of Financial Transactions Concerning Cities of California, Published by the Office of State Controller, 1958, Table 17

Column 3: California State Board of Equalization; Annual Report, 1959-60, Table 9a.

Columns 5 and 7: Apportionment of the State School Fund, California State Department of Education, 1960. (Appendix A, Part I and Part 2 for Column 5); P. x for Column 7.

1. Tax Rate includes Junior College Tax. In other districts tax rate is for grades K-12.

2. County tax is included for San Francisco.

3. Deleted from table because the data for these districts were confounded by other factors and not useable.

TABLE XXII

Impact of Correction Factor Upon Combined Local Tax Rate in California Cities of 50,000 or more Population, 1960.

School Districts	State Equalized Combined Local Tax Rate	Change in Local Tax Rate Resulting From Application of C.F. Same Cost Program		State Equalized Combined Local Tax Rate After C.F. Is Applied	
		Present Program	Without Flat Grant	Present Program	Without Flat Grant
1	2	3	4	5	6
Alameda	5.84	-.14	-.14	5.70	5.70
Alhambra	4.70	-.11	-.11	4.59	4.59
Anaheim	3.48	+.11	+.11	3.59	3.59
Bakersfield	6.93	+.09	+.09	6.72	6.72
Berkeley	5.20	-.09	-.09	5.11	5.11
Burbank	3.62	--	-.03	3.62	3.59
Compton	3.80	+.13	+.13	3.93	3.93
Downey	3.04	+.03	+.03	3.07	3.07
Fresno	5.17	+.05	+.05	5.22	5.22
Fullerton	4.17	+.10	+.10	4.27	4.27
Garden Grove	3.11	+.18	+.18	3.29	3.29
Glendale	3.84	-.09	-.09	3.75	3.75
Hayward	5.95	+.18	+.18	6.03	6.03
Inglewood	3.93	-.07	-.11	3.86	3.82
Long Beach	4.32	-.07	-.07	4.25	4.25
Los Angeles	4.51	-.05	-.05	4.46	4.46
Oakland	6.42	-.07	-.07	6.35	6.35
Palo Alto	4.61	+.03	+.03	4.64	4.64
Pasadena	4.38	-.10	-.10	4.28	4.28
Pomona	4.21	+.02	+.02	4.23	4.23

TABLE XXII

(Page 2)

School Districts	State Equalized Combined Local Tax Rate	Change in Local Tax Rate Resulting From Application of C.F. Same Cost Program		State Equalized Combined Local Tax Rate After C.F. Is Applied	
		Present Program	Without Flat Grant	Present Program	Without Flat Grant
1	2	3	4	5	6
Richmond	5.29	+.04	+.04	5.33	5.33
Riverside	4.11	+.08	+.08	4.19	4.19
Sacramento	4.75	-.03	-.03	4.72	4.72
San Bernardino	4.74	+.04	+.04	4.78	4.78
San Diego	4.61	-.08	-.08	4.53	4.53
San Francisco	8.72	-.10	-.15	8.62	8.57
San Jose	4.76	-.01	-.01	4.75	4.75
San Leandro	4.22	+.04	+.04	4.26	4.26
San Mateo	5.35	--	--	5.35	5.35
Santa Ana	3.61	-.01	-.01	3.60	3.60
Santa Barbara	4.23	-.06	-.06	4.17	4.17
Santa Clara	4.59	+.03	+.03	4.62	4.62
Santa Monica	3.73	--	-.15	3.73	3.58
Stockton	5.21	-.02	-.02	5.19	5.19
Torrance	3.86	+.11	+.11	3.97	3.97
Vallejo	4.76	+.03	+.03	4.79	4.79

Source: Column 2: Table XXI, Column 8

Column 3: Negative of Table XIX, Column 7

Column 4: Negative of Table XX, Column 7

CHAPTER VI

SUMMARY AND CONCLUSION

A local tax allocation Correction Factor, for use in the apportionment of state school funds, is developed in Chapter 1. This Correction Factor is intended to "correct" the local contribution to the state school foundation program for variation in burdens upon local school property tax payers for other local governmental services. In developing the Correction Factor it is assumed that the cost of other local governmental services is proportional to total population and that the local contribution to the school foundation program should require equal local property tax "effort." Two definitions of equal property tax "effort" are discussed and the definition which recognizes the total local property tax burden is used in developing the Correction Factor.

In Chapter 4, Burke discusses an underlying theoretical question and expresses a preference for the view that the local contribution to the public school foundation program should be regarded purely as a measure of the expected yield of a prescribed tax rate uniformly applied in all school districts. He defends this point of view, in part, by pointing out the errors of measurement inherent in any state school support program and the many other considerations involved in the definition of equal ability to pay property taxes. Under this interpretation no "correction" is needed.

This author, however, contends that statistical measures of local capacity to pay taxes must be examined to determine if other burdens bear unequally upon the resources measured by the statistic. If it is found that other burdens do bear unequally, then the assumption that equal proportions of the statistical measure are valid indices of the amounts of money local tax payers should be expected to contribute to the state school foundation program is questionable.

This theoretical question cannot be resolved by logical analysis. Its resolution depends upon judgments concerning tax equity, and the characteristics of a sound fiscal program for public schools. Moreover, some knowledge about the magnitude of the problem and the feasibility of alternate solutions is needed.

The ratio of total population to public school enrollment for U.S. cities of 50,000 or more is included in Appendix A. This ratio indicates the total number of persons for whom other local governmental services must be provided per child enrolled in public schools. At the other extreme there are 13 cities in which less than 4 persons require other local governmental services per child enrolled in public schools. Assuming equal per capita cost of other local governmental services, the burden for such services in relation to the public school costs in the first 25 cities will be more than twice as much as in the second group of thirteen cities. The distribution of the ratios of total population to public school enrollment in the 332 cities listed in Appendix A is:

Population per Public school pupil	Number of cities
10 or more	3
9 to 9.99	4
8 to 8.99	18
7 to 7.99	34
6 to 6.99	72
5 to 5.99	111
4 to 4.99	77
Less than 4	13
Total	332

Explanation of the variation in these ratios is, in a sense, irrelevant. If there is a relatively large total population requiring local governmental services, funds for these services must be provided irrespective of the explanation for the unusual ratio. Three factors explain most of the variation: family size, school drop-outs, and per cent of school children enrolled in nonpublic schools. A correlation analysis of data in Appendix A indicates that 2/3 of the variance in the ratio of total population to public school attendance is "explained" by the per cent of school children attending nonpublic schools. A similar analysis of data for California cities of 50,000 or more population indicate that 1/3 of the variance is "explained" by per cent of school children enrolled in nonpublic schools.

Correction Factors derived from the above ratios and the corresponding ratios for the states in which each of the 332 cities is located, are distributed as follows:

Correction Factors	Number of Cities
1.15 or more	4
1.10 - 1.14	11
1.05 - 1.09	24
1.00 - 1.04	40
.95 - .99	93
.90 - .94	77
.85 - .89	45
.80 - .84	27
.75 - .79	7
Less than .75	4
Total	332

If all states apportioned state school funds to these cities in accordance with a foundation program formula, 15 cities would be required to increase their local contributions to the state school foundation program by 10% or more and would receive corresponding reductions in state school support. On the other hand 83 cities would be permitted to reduce their required contributions to their state school foundation programs by 10% or more and would receive corresponding increases in state school funds.

While this table provides a useful estimate of the potential impact of the Correction Factor, its actual effects can only be ascertained by precise application in each state. In Chapters 2, 3, 4, and 5, impacts of the Correction Factor upon the apportionment of school funds in Florida, Illinois, New York and California are analyzed in greater detail. Even in these applications, problems and issues were encountered which could not be adequately analyzed in the study.

The Non-Coterminality Problem

School district boundaries usually do not coincide with those of other governmental units. This lack of coterminality of boundaries offers many difficulties to investigators of local school finance problems.

The assumption has been made in this study that when large cities are under examination, the ratio of N/A for these cities will not differ greatly from the same ratio for overlapping school districts. This presumes that the tendency for school districts to be coterminous with municipalities is greater in large cities, and that the population in non-common areas is small relative to the population in common areas in these cities.

The nature of the coterminality problem in many states is the stabilization of one governmental boundary where practices of annexation, consolidation, and unification have altered the boundaries of another previously coterminous governmental unit. It is easily seen that the smaller unit, if it represents the central core of a geographically larger governmental entity, is more likely to have fewer children. It is probable that the N/A ratio would differ between a city and a school district in such an instance. Thus, San Francisco with its restricted municipal boundaries has a much greater N/A ratio than is found for Los Angeles where municipal boundaries have been extended to include suburban areas.

There is the additional problem of determining, accurately, the municipal tax rates paid by school district residents. The fact is, that residents of a school district may all reside in the same city, may be in several municipalities, or may reside partially in a city and partially in unincorporated land. Sometimes the task is complicated by special taxing districts, each of which has its own boundaries.

Johns, in his analysis for Florida, discusses this problem. He notes that accurate determination of the N/A ratio for school districts in Florida presents no problem since school districts are coterminous with counties. But within a county-wide school district some taxpayers reside within incorporated cities and pay property taxes for municipal services, whereas others living in the same county-wide school district, but in unincorporated areas, do not. He then asks if benefits accruing to school district taxpayers resulting from application of the Correction Factor should be shared equally by those who pay municipal property taxes and those who do not.

There is no entirely satisfactory answer to this question. It is, of course, true that with or without the Correction Factor all residents of the county-wide school district pay the same school tax rate. In this sense, introduction of the Correction Factor does not alter the situation. But the question of which uniform county-wide school tax rate is most equitable remains unanswered.

Non-Resident Contact Population

Closely related to the question raised by Johns is the complex relationship between a city and its non-resident contact population. In his analysis of the problem in New York, Burke points out that cities are able to shift a portion of their tax burden to non-residents. Sales and payroll taxes are obvious examples of taxes which are paid in part by non-residents. Similarly, property taxes levied on commercial properties are shifted to some extent to non-residents.

At the same time cities are required to provide municipal services for the same contact population to which a portion of their tax burdens are shifted. The net effect upon resident property taxpayers of cities is unknown and suggests an important area of further study. For example, in resort cities the cost of municipal services per resident is ordinarily relatively high; at the same time these cities are usually able to shift a substantial part of their municipal tax burden to non-residents.

Flat-grant Options

In the computation of state support for school districts in California, Illinois and New York, flat-grant options are provided under which each school district has the option of receiving from the state a fixed amount per pupil or an equalization payment. Wealthy school districts, in which the assessed valuation of taxable property per pupil is relatively high, usually are entitled to more state aid under the flat-grant option than they would receive under the foundation program formula. In some states the flat-grant is paid first to all school districts and then a supplementary "equalization" payment is paid only to the less wealthy school districts. In still others, the school support law includes a "save harmless" clause which assures an amount of state aid to each school district not less than the amount it received in a specified prior year.

These modifications of the foundation program distort the effects of the Correction Factor which should be used to replace, not supplement, advantages enjoyed by "wealthy" school districts under these special provisions. In some states, such as California, application of the Correction Factor accomplishes this purpose without additional changes in the law. In others, more extensive modification of state law is needed to achieve the desired results. Except for the application in California no effort is made in this report to analyze the impact of the Correction Factor under the assumption that flat-grant provisions are simultaneously repealed.

Conclusions

Variation in the ratio of total population to public school attendance is sufficiently great to warrant consideration in the apportionment of public school funds.

The Correction Factor suggested in this report tends to provide relief primarily for large cities.

Per capita costs of municipal services vary among cities in different population size groups, with higher per capita costs occurring in the larger cities.

Since equal per capita cost of municipal services is assumed, the case for the large cities may be understated by the Correction Factor.

The capacity of cities to shift tax burdens to non-residents is offset to some extent by municipal services required for them when they come into the city to work or make purchases. The net effect of non-resident "contact" population upon tax revenues and service requirements is not known. Further study of this relationship is needed.

Use of the Correction Factor in the computation of state equalization payments to city school systems in California failed to show a significant reduction in the variability of total property tax rates when changes in state aid were converted to adjustments in local school tax rates.

The existence of optional flat-grant options and "save harmless" clauses accompanying state school foundation programs often obscure the effect of the Correction Factor. For example, San Francisco receives state support for elementary schools under the "basic aid" option. If the Correction Factor were used in California, San Francisco would receive greater amounts of state funds under the equalization formula and would cease to be a basic aid district. Similar changes would occur in cities in other states. Indeed, the persistance of flat-grant options and "save harmless" clauses may stem from failure to recognize, in foundation programs, the special problems of large cities including the relatively high cost of municipal services. Use of the Correction Factor may facilitate elimination of confusing flat-grant options and "save harmless" clauses.

On the basis of evidence examined in this report it is not possible to conclude that the proposed Correction Factor should be used generally in state school support programs. Although variation in the N/A ratio indicates that the problem is significant, practical difficulties which would be encountered in implementation cannot be ignored. Perhaps more attention should be given to the use of nonproperty taxes and state support for municipalities, which would reduce the need for the Correction Factor.

If specific legislative proposals incorporating the Correction Factor are developed the following suggestions are offered: 1. The general form of the Correction Factor (Formula VII) should be used to give due consideration to the extent to which property taxes are used for municipal purposes. 2. A more precise analysis of the non-coterminality problem should be made including a more thorough study of the net effects of tax shifting to, and services required for, non-resident contact populations. 3. The Correction Factor should not be introduced as a single amendment; interrelated aspects of the entire school support problem should be reexamined simultaneously.

Computation of the Correction Factor
For Cities of 50,000 or More Population

City 1	Population 1960 2	Total Pub. Sch. Enrol. 3	Ratio Pop. Over Public Sch. Enrol. 4	% Of Total K-12 Enrol. In Pub. Sch. 5	Correction Factor 6
ALABAMA					
Birmingham	340,887	67,997	5.01	94%	.91
Gadsen	58,088	13,370	4.34	96	.98
Huntsville	72,365	14,451	5.01	92	.91
Mobile	202,779	41,136	4.93	81	.92
Montgomery	134,393	27,559	4.88	89	.92
Tuscaloosa	63,370	11,471	5.52	97	.86
STATE TOTAL	3,266,740	781,605	4.18	96	1.00
ALASKA	(No Cities over 50,000)				
STATE TOTAL	226,167	47,739	4.74	95	1.00
ARIZONA					
Phoenix	439,170	94,297	4.66	90	.98
Tuscon	212,892	43,243	4.92	86	.95
STATE TOTAL	1,302,161	292,685	4.45	91	1.00
ARKANSAS					
Fort Smith	52,991	10,777	4.92	87	.93
Little Rock	107,813	19,081	5.65	89	.86
North Little Rock	58,032	11,917	4.87	93	.93
STATE TOTAL	1,786,272	419,085	4.26	97	1.00
CALIFORNIA					
Alameda	63,855	10,734	5.95	91	.90
Alhambra	54,807	7,651	7.16	77	.81
Anaheim	104,184	25,644	4.06	92	1.09
Arden Arcade	73,352	18,541	3.96	88	1.10
Bakersfield	56,848	13,281	4.28	92	1.06
Berkeley	111,268	16,989	6.55	92	.85
Burbank	90,155	16,759	5.38	86	.95
Compton	71,812	17,642	4.07	93	1.09
Downey	82,505	19,273	4.28	88	1.06
East Los Angeles	104,270	21,992	4.74	87	1.01

City 1	Population 1960 2	Total Pub. Sch. Enrol. 3	Ratio Pop. Over Public Sch. Enrol. 4	% Of Total K-12 Enrol. In Pub. Sch. 5	Correction Factor 6
CALIFORNIA (Cont'd)					
Fresno	133,929	29,152	4.60	94%	1.03
Fullerton	56,180	14,652	3.83	94	1.12
Garden Grove	84,238	22,771	3.70	93	1.13
Glendale	119,442	18,004	6.63	87	.84
Hayward	72,700	19,558	3.72	96	1.13
Inglewood	63,390	8,963	7.07	82	.81
Lakewood	67,126	18,698	3.59	89	1.15
Long Beach	344,153	56,017	6.14	88	,88
Los Angeles	2,481,456	429,578	5.78	86	.91
Norwalk	88,739	24,399	3.64	93	1.14
Oakland	367,548	60,460	6.08	87	.86
Palo Alto	52,287	12,270	4.26	92	1.06
Pasadena	116,407	17,126	6.80	83	.83
Pomona	67,157	14,478	4.64	88	1.02
Richmond	71,854	17,014	4.22	95	1.07
Riverside	84,332	19,708	4.28	91	1.06
Sacramento	191,667	35,755	5.36	89	.95
San Bernardino	91,922	20,311	4.53	91	1.03
San Diego	573,224	105,957	5.41	90	.94
San Francisco	740,316	93,258	7.94	76	.76
San Jose	204,196	41,501	4.92	93	.99
San Leandro	65,962	15,672	4.21	96	1.07
San Mateo	69,870	14,391	4.86	86	1.00
Santa Ana	100,350	20,444	4.91	89	.99
Santa Barbara	58,768	10,057	5.84	87	.90
Santa Clara	58,880	13,569	4.34	93	1.05
Santa Monica	83,249	10,260	8.11	84	.75
South Gate	53,831	8,366	6.43	86	.86
Stockton	86,321	17,268	5.00	91	.98
Sunnyvale	52,898	13,545	3.91	96	1.11
Torrance	100,991	25,467	3.97	88	1.10
Vallejo	60,877	13,431	4.53	93	1.03
West Covina	50,962	13,683	3.72	88	1.13
STATE TOTAL	15,717,204	3,256,081	4.83	90	1.00
COLORADO					
Colorado Springs	70,194	14,127	4.97	87	.97
Denver	493,887	86,913	5.68	83	.90

City	Population 1960	Total Pub. Sch. Enrol.	Ratio Pop. Over Public Sch. Enrol.	% Of Total K-12 Enrol. In Pub. Sch.	Correction Factor
1	2	3	4	5	6
GEORGIA (Cont'd)					
Augusta	70,626	15,189	4.65	94%	.95
Columbus	116,779	26,988	4.33	98	.99
Macon	69,764	14,535	4.80	96	.93
Savannah	149,245	30,174	4.95	87	.92
STATE TOTAL	3,942,936	939,641	4.20	97	1.00
HAWAII					
Honolulu	294,194	60,570	4.86	80	.95
STATE TOTAL	632,772	144,082	4.39	84	1.00
IDAHO	(No Cities over 50,000)				
STATE TOTAL	667,191	163,222	4.09	95	1.00
ILLINOIS					
Aurora	63,715	9,503	6.70	70	.94
Berwyn	54,224	6,329	8.57	68	.82
Chicago	3,550,404	465,328	7.63	67	.88
Cicero	69,130	7,358	9.40	59	.78
Decatur	78,004	15,084	5.17	89	1.07
East St. Louis	81,712	15,276	5.35	84	1.05
Evanston	79,283	9,940	7.98	78	.85
Joliet	66,780	8,849	7.55	63	.88
Oak Park	61,093	7,161	8.53	61	.82
Peoria	103,162	16,606	6.21	79	.98
Rockford	126,706	23,226	5.46	84	1.05
Rock Island	51,863	8,711	5.95	77	1.00
Skokie	59,364	12,484	4.76	81	1.11
Springfield	83,271	11,916	6.99	70	.92
Waukegan	55,719	10,451	5.33	85	1.06
STATE TOTAL	10,081,653	1,689,995	5.97	77	1.00
INDIANA					
E. Chicago	57,669	10,136	5.69	79	.93
Evansville	141,531	25,166	5.62	79	.94
Fort Wayne	161,776	25,738	6.29	72	.88

City 1	Population 1960 2	Total Pub. Sch. Enrol. 3	Ratio Pop. Over Public Sch. Enrol. 4	% Of Total K-12 Enrol. In Pub. Sch. 5	Correction Factor 6
INDIANA (Cont'd)					
Gary	178,312	40,044	4.45	90%	1.06
Hammond	111,698	20,700	5.40	78	.96
Indianapolis	476,258	83,509	5.70	86	.93
Muncie	68,603	14,138	4.85	96	1.02
South Bend	132,445	23,217	5.70	75	.93
Terre Haute	72,500	12,895	5.62	88	.94
STATE TOTAL	4,662,451	935,013	4.99	88	1.00
IOWA					
Cedar Rapids	92,035	15,995	5.75	80	.92
Council Bluffs	55,641	11,472	4.85	89	1.00
Davenport	88,981	15,883	5.60	81	.93
Des Moines	208,982	39,191	5.33	88	.96
Dubuque	56,606	4,657	12,16	37	.57
Sioux City	89,159	15,796	5.64	77	.93
Waterloo	71,755	13,030	5.51	77	.94
STATE TOTAL	2,757,537	565,669	4.87	86	1.00
KANSAS					
Kansas City	121,901	21,194	5.75	82	.91
Topeka	119,484	21,341	5.60	88	.92
Wichita	254,698	52,309	4.87	90	1.00
STATE TOTAL	2,178,618	453,607	4.80	91	1.00
KENTUCKY					
Covington	60,376	7,759	7.78	66	.78
Lexington	62,810	8,936	7.03	89	.83
Louisville	390,639	54,689	7.14	71	.82
STATE TOTAL	3,038,156	614,054	4.95	88	1.00
LOUISIANA					
Baton Rouge	152,419	29,225	5.22	80	.94
Lake Charles	63,392	12,912	4.91	86	.98
Monroe	52,219	11,406	4.58	93	1.01
New Orleans	627,525	93,050	6.74	67	.82

City 1	Population 1960 2	Total Pub. Sch. Enrol. 3	Ratio Pop. Over Public Sch. Enrol. 4	% Of Total K-12 Enrol. In Pub. Sch. 5	Correction Factor 6
COLORADO (Cont'd)					
Pueblo	91,181	18,806	4.85	86%	.98
STATE TOTAL	1,753,925	378,990	4.63	90	1.00
CONNECTICUT					
Bridgeport	156,748	23,130	6.78	75	.89
Greenwich	53,793	9,164	5.87	71	.96
Hartford	162,178	23,108	7.02	79	.87
Meriden	51,850	9,009	5.76	79	.97
New Britain	82,201	13,986	5.92	81	.96
New Haven	152,048	21,000	7.24	76	.85
Norwalk	67,775	13,009	5.21	89	1.02
Stamford	92,713	14,480	6.40	72	.92
Waterbury	107,130	16,803	6.38	73	.92
W. Hartford	62,382	12,285	5.08	83	1.03
STATE TOTAL	2,535,234	468,607	5.41	84	1.00
DELEWARE					
Wilmington	95,827	12,886	7.44	69	.86
STATE TOTAL	446,292	79,095	5.64	81	1.00
FLORIDA					
Fort Lauderdale	83,648	14,279	5.86	87	.93
Hialeah	66,972	14,117	4.74	85	1.04
Jacksonville	201,030	39,804	5.05	95	1.01
Miami	291,688	41,027	7.11	90	.84
Miami Beach	63,145	6,096	10.36	87	.66
Orlando	88,133	15,962	5.52	91	.96
Pensacola	56,752	11,657	4.87	86	1.03
St. Petersburg	181,298	25,008	7.25	89	.83
Tampa	274,970	51,236	5.37	90	.98
W. Palm Beach	56,208	9,178	6.12	87	.91
STATE TOTAL	4,952,788	967,867	5.12	92	1.00
GEORGIA					
Albany	55,890	12,975	4.31	97	.99
Atlanta	487,275	96,883	5.03	94	.91

City 1	Population 1960 2	Total Pub. Sch. Enrol. 3	Ratio Pop. Over Public Sch. Enrol. 4	% Of Total K-12 Enrol. In Pub. Sch. 5	Correction Factor 6
LOUISIANA (Cont'd)					
Shreveport	164,372	34,355	4.78	91%	.99
STATE TOTAL	3,257,022	696,418	4.68	85	1.00
MAINE					
Portland	72,566	12,777	5.68	83	.93
STATE TOTAL	969,265	197,950	4.90	87	1.00
MARYLAND					
Baltimore	939,024	162,436	5.78	82	.96
Bethesda	56,527	11,451	4.94	75	1.04
Dundalk	82,428	16,529	4.99	83	1.04
Silver Spring	66,348	13,394	4.95	78	1.04
Wheaton	54,635	13,973	3.91	84	1.16
STATE TOTAL	3,100,687	578,810	5.36	82	1,00
MASSACHUSETTS					
Boston	697,938	87,802	7.95	68	.86
Brockton	72,813	12,403	5.87	87	1.01
Brookline	54,044	6,698	8.07	77	.85
Cambridge	107,716	10,415	10.34	61	.74
Chicopee	61,554	10,058	6.12	71	.99
Fall River	99,942	13,568	7.37	66	.90
Holyoke	52,689	6,112	8.62	57	.82
Lawrence	70,933	8,302	8.54	60	.83
Lowell	92,107	11,817	7.79	61	.8[illegible]
Lynn	94,478	13,923	6.79	77	.94
Malden	57,676	9,128	6.32	78	.98
Medford	64,971	9,957	6.53	73	.96
New Bedford	102,477	14,646	7.00	74	.93
Newton	92,384	17,308	5.34	80	1.06
Pittsfield	57,879	11,117	5.21	83	1.07
Quincy	87,409	15,224	5.74	81	1.03
Somerville	94,697	12,007	7.89	64	.87
Springfield	174,463	28,278	6.17	76	.99
Waltham	55,413	9,136	6.07	80	1.00
Worcester	186,587	28,881	6.46	77	.97
STATE TOTAL	5,149,317	855,184	6.02	78	1.00
MICHIGAN					
Ann Arbor	67,340	9,314	7.23	89	.80
Bay City	53,604	7,962	6.73	60	.83

City 1	Population 1960 2	Total Pub. Sch. Enrol. 3	Ratio Pop. Over Public Sch. Enrol. 4	% Of Total K-12 Enrol. In Pub. Sch. 5	Correction Factor 6
MICHIGAN (Cont'd)					
Dearborn	112,007	21,185	5.29	78%	.95
Detroit	1,670,144	285,385	5.85	77	.90
Flint	196,940	38,765	5.08	86	.98
Grand Rapids	177,313	25,350	6.99	64	.82
Jackson	50,720	8,656	5.86	75	.90
Kalamazoo-	82,089	13,701	5.99	83	.89
Lansing	107,807	21,811	4.94	86	.99
Lincoln Park	53,933	12,573	4.29	83	1.06
Livonia	66,702	14,799	4.51	85	1.03
Pontiac	82,233	16,846	4.88	91	1.00
Roseville	50,195	11,961	4.20	83	1.07
Royal Oak	80,612	17,011	4.74	80	1.01
Saginaw	98,265	18,720	5.25	79	.96
St. Clair Shores	78,031	15,441	5.05	78	.98
Warren	89,246	17,700	5.04	82	.98
STATE TOTAL	7,824,965	1,623,903	4.82	84	1.00
MINNESOTA					
Bloomington	50,498	10,215	4.94	80	1.02
Duluth	106,884	20,990	5.09	85	1.00
Minneapolis	482,872	71,117	6.79	79	.85
St. Paul	313,411	42,230	7.42	62	.81
STATE TOTAL	3,413,864	672,952	5.07	82	1.00
MISSISSIPPI					
Jackson	144,422	31,317	4.61	93	.91
STATE TOTAL	2,178,141	565,051	3.85	97	1.00
MISSOURI					
Independence	62,328	12,601	4.95	91	1.07
Kansas City	476,500	75,568	6.31	84	.95
St. Joseph	79,673	12,606	6.32	83	.95
St. Louis	750,026	100,504	7.46	72	.87
Springfield	95,865	16,818	5.70	91	1.00
University City	51,249	8,428	6.08	77	.97
STATE TOTAL	4,320,774	756,364	5.71-	83	1.00
MONTANA					
Billings	52,851	10,169	5.20	80	.95
Great Falls	55,357	10,205	5.42	80	.93
STATE TOTAL	674,767	143,662	4.70	88	1.00

3

City 1	Population 1960 2	Total Pub. Sch. Enrol. 3	Ratio Pop. Over Pub. Sch. Enrol. 4	% Of Total K-12 Enrol. In Pub. Sch. 5	Correction Factor 6
NEBRASKA					
Lincoln	128,521	22,613	5.68	87%	.93
Omaha	301,598	46,079	6.55	71	.87
STATE TOTAL	1,411,330	282,957	4.99	85	1.00
NEVADA					
Las Vegas	64,405	13,377	4.81	91	.97
Reno	51,470	9,914	5.19	92	.93
STATE TOTAL	285,278	63,053	4.52	95	1.00
NEW HAMPSHIRE					
Manchester	88,282	9,680	9.12	53	.78
STATE TOTAL	606,921	103,897	5.84	79	1.00
NEW JERSEY					
Atlantic City	59,544	8,279	7.19	82	.90
Bayonne	74,215	9,035	8.21	58	.83
Bloomfield	51,867	7,781	6.67	77	.93
Camden	117,159	19,437	6.03	78	.99
Clifton	82,084	12,723	6.45	72	.95
East Orange	77,259	9,044	8.54	76	.82
Elizabeth	107,698	13,418	8.03	64	.84
Hamilton	65,035	10,555	6.16	72	.98
Irvington	59,379	7,961	7.46	79	.88
Jersey City	276,101	32,708	8.44	60	.82
Newark	405,220	64,892	6.24	82	.97
Passaic	53,963	8,092	6.67	79	.93
Paterson	143,663	22,104	6.50	81	.95
Trenton	114,167	14,940	7.64	69	.87
Union	51,499	8,646	5.96	81	.99
Union City	52,180	6,400	8.15	70	.84
Woodbridge	78,846	16,052	4.91	79	1.09
STATE TOTAL	6,067,412	1,033,719	5.87	79	1.00
NEW MEXICO					
Albuquerque	201,189	40,571	4.96	83	.92
STATE TOTAL	951,023	225,387	4.22	90	1.00
NEW YORK					
Albany	129,726	14,437	8.99	58	.81
Binghamton	75,941	12,551	6.05	82	1.01
Buffalo	532,759	68,741	7.75	64	.88

City 1	Population 1960 2	Total Pub. Sch. Enrol. 3	Ratio Pop. Over Public Sch. Enrol. 4	% Of Total K-12 Enrol. In Pub. Sch. 5	Correction Factor 6
NEW YORK (Cont'd)					
Cheektowaga - North West	52,362	8,268	6.33	62%	.99
Hicksville	50,405	13,740	3.67	91	1.25
Levittown	65,276	19,400	3.36	96	1.29
Mount Vernon	76,010	11,655	6.52	79	.97
New Rochelle	76,812	11,380	6.75	71	.95
New York City	7,783,314	1,005,929	7.74	72	.88
Niagara Falls	102,394	18,760	5.46	80	1.06
Rochester	318,611	39,545	8.06	66	.87
Schenectady	81,682	12,271	6.66	79	.96
Syracuse	216,038	29,023	7.44	71	.90
Tonawanda	83,771	16,547	5.06	74	1.10
Troy	67,492	6,927	9.74	50	.78
Utica	100,410	15,597	6.44	77	.98
White Plains	50,485	8,008	6.30	81	.99
Yonkers	190,634	25,276	7.54	66	.90
STATE TOTAL	16,783,604	2,727,540	6.15	78	1.00
NORTH CAROLINA					
Asheville	60,192	11,580	5.20	93	.90
Charlotte	201,564	42,077	4.79	95	.94
Durham	78,302	15,157	5.17	96	.90
Greensboro	119,574	23,788	5.03	94	.92
High Point	62,063	12,552	4.94	97	.93
Raleigh	93,931	16,503	5.69	93	.85
Winston-Salem	111,135	22,163	5.01	94	.92
STATE TOTAL	4,556,155	1,072,045	4.25	98	1.00
NORTH DAKOTA	(No Cities Over 50,000)				
STATE TOTAL	632,446	141,238	4.48	89	1.00
OHIO					
Akron	290,351	53,489	5.43	84	.98
Canton	113,631	20,738	5.48	87	.98
Cincinnati	502,550	74,234	6.77	74	.87
Cleveland	876,050	131,781	6.65	74	.88
Cleveland Heights	61,813	9,361	6.60	70	.88
Columbus	471,316	78,421	6.01	85	.93
Dayton	262,332	46,404	5.65	83	.96
Euclid	62,998	10,740	5.87	69	.94
Hamilton	72,354	13,468	5.37	85	.99
Kettering	54,462	11,058	4.93	80	1.03

City 1	Population 1960 2	Total Pub. Sch. Enrol. 3	Ratio Pop. Over Public Sch. Enrol. 4	% Of Total K-12 Enrol. In Pub. Sch. 5	Correction Factor 6
OHIO (Cont'd)					
Lakewood	66,154	8,384	7.89	67%	.80
Lima	51,037	9,351	5.46	82	.98
Lorain	68,932	12,933	5.33	81	.99
Parma	82,845	13,588	6.10	63	.93
Springfield	82,723	15,286	5.41	85	.99
Toledo	318,003	50,217	6.33	73	.90
Warren	59,648	11,032	5.41	86	.99
Youngstown	166,689	26,327	6.33	72	.90
STATE TOTAL	9,707,136	1,852,762	5.24	84	1.00
OKLAHOMA					
Lawton	61,697	12,228	5.05	93	.95
Oklahoma City	324,253	66,731	4.86	94	.97
Tulsa	261,685	55,942	4.68	93	.99
STATE TOTAL	2,328,284	510,751	4.56	96	1.00
OREGON					
Eugene	50,977	9,216	5.53	91	.91
Portland	372,664	65,153	5.72	85	.90
Salem	49,142	8,101	6.07	85	.87
STATE TOTAL	1,768,675	380,938	4.64	92	1.00
PENNSYLVANIA					
Abington	55,831	9,148	6.10	68	.99
Allentown	108,347	15,202	7.13	76	.91
Altoona	69,407	11,437	6.07	78	.99
Bethlehem	75,408	12,186	6.19	75	.98
Bristol	59,298	9,673	6.13	63	.99
Chester	63,658	9,903	6.43	73	.96
Erie	138,440	20,805	6.65	66	.95
Harrisburg	79,697	12,663	6.29	86	.98
Haverford	54,019	6,740	8.01	52	.85
Johnstown	53,949	9,078	5.94	77	1.01
Lancaster	61,055	9,198	6.64	82	.95
Lower Merion	59,420	8,663	6.86	65	.93
Penn Hills	51,512	9,373	5.50	76	1.04
Philadelphia	2,002,509	241,114	8.31	62	.84
Pittsburgh	604,332	71,174	8.49	59	.83
Reading	98,177	14,184	6.92	82	.93
Scranton	111,443	16,758	6.65	73	.95
Upper Darby	93,158	9,768	9.54	49	.77

City 1	Population 1960 2	Total Pub. Sch. Enrol. 3	Ratio Pop. Over Public Sch. Enrol. 4	% Of Total K-12 Enrol. In Pub. Sch. 5	Correction Factor 6
PENNSYLVANIA (Cont'd)					
Wilkesbarre	63,551	9,128	6.96	75%	.93
York	54,504	9,545	5.71	89	1.03
STATE TOTAL	11,320,580	1,894,009	5.98	78	1.00
RHODE ISLAND					
Cranston	66,766	11,059	6.04	79	1.05
Pawtucket	81,001	9,707	8.34	62	.89
Providence	207,498	27,094	7.66	70	.93
Warwick	68,504	13,689	5.00	86	1.14
STATE TOTAL	859,488	129,177	6.65	73	1.00
SOUTH CAROLINA					
Charleston	65,925	12,555	5.25	86	.88
Columbia	97,433	18,588	5.24	96	.88
Greenville	66,188	12,386	5.34	93	.87
STATE TOTAL	2,382,594	581,364	4.10	97	1.00
SOUTH DAKOTA					
Sioux Falls	65,466	13,508	4.85	86	.95
STATE TOTAL	680,514	155,275	4.38	91	1.00
TENNESSEE					
Chattanooga	130,009	26,387	4.93	94	.96
Knoxville	111,827	21,878	5.11	97	.94
Memphis	497,524	100,694	4.94	90	.96
Nashville	170,874	29,566	5.78	94	.88
STATE TOTAL	3,567,089	780,003	4.57	96	1.00
TEXAS					
Abilene	90,368	16,825	5.37	94	.94
Amarillo	137,969	26,929	5.12	91	.96
Austin	186,545	34,151	5.46	92	.93
Beaumont	119,175	23,711	5.03	89	.97
Corpus Christi	167,690	37,406	4.48	89	1.03
Dallas	679,684	125,460	5.42	91	.93
El Paso	276,687	60,782	4.55	89	1.02
Fort Worth	356,729	69,668	5.12	95	.96
Galveston	67,175	10,900	6.16	80	.87
Houston	938,219	186,934	5.02	90	.97
Laredo	60,678	13,263	4.57	82	1.02
Lubbock	128,691	26,269	4.90	96	.99
Midland	62,625	13,816	4.53	92	1.03

City 1	Population 1960 2	Total Pub. Sch. Enrol. 3	Ratio Pop. Over Public Sch. Enrol. 4	% Of Total K-12 Enrol. In Pub. Sch. 5	Correction Factor 6
TEXAS (Cont'd)					
Odessa	80,338	19,132	4.20	99%	1.06
Pasadena	58,737	14,254	4.12	93	1.07
Port Arthur	66,676	13,320	5.01	85	.98
San Angelo	58,815	12,553	4.69	94	1.01
San Antonio	588,042	112,808	5.21	82	.95
Tyler	51,352	10,519	4.88	95	.99
Waco	97,808	18,478	5.29	94	.95
Wichita Falls	101,724	18,358	5.54	93	.92
STATE TOTAL	9,581,508	2,016,349	4.75	93	1.00
UTAH					
Ogden	70,197	18,283	3.84	97	1.01
Salt Lake City	189,454	40,496	4.68	95	.90
STATE TOTAL	890,627	230,260	3.87	97	1.00
VERMONT	(No Cities Over 50,000)				
STATE TOTAL	389,881	74,647	5.22	83	1.00
VIRGINIA					
Alexandria	91,023	14,030	6.49	79	.86
Arlington County	163,401	24,368	6.71	78	.84
Hampton	89,258	17,462	5.11	88	.98
Lynchburg	54,790	10,901	5.03	95	.99
Newport News	113,662	23,509	4.83	93	1.01
Norfolk	305,872	51,297	5.96	86	.90
Portsmouth	114,773	22,652	5.07	94	.99
Richmond	219,958	37,579	5.85	92	.91
Roanoke	97,110	18,589	5.22	94	.97
STATE TOTAL	3,954,429	806,668	4.90	93	1.00
WASHINGTON					
Seattle	557,087	89,918	6.20	83	.85
Spokane	181,608	31,327	5.80	80	.89
Tacoma	147,979	29,648	4.99	88	.96
STATE TOTAL	2,853,214	616,339	4.63	91	1.00
WEST VIRGINIA					
Charleston	85,796	16,370	5.24	92	.90
Huntington	83,627	14,815	5.64	93	.87

City 1	Population 1960 2	Total Pub. Sch. Enrol. 3	Ratio Pop. Over Public Sch. Enrol. 4	% Of Total K-12 Enrol. In Pub. Sch. 5	Correction Factor 6
WEST VIRGINIA (Cont'd)					
Wheeling	53,400	6,559	8.14	64%	.69
STATE TOTAL	1,860,421	428,658	4.34	96	1.00
WISCONSIN					
Green Bay	62,888	8,742	7.19	56	.88
Kenosha	67,899	10,858	6.25	68	.96
Madison	126,706	19,945	6.35	84	.95
Milwaukee	741,324	104,324	7.11	67	.89
Racine	89,144	15,048	5.92	72	.98
Wauwatosa	56,923	8,366	6.80	65	.91
West Allis	68,157	10,079	6.76	64	.92
STATE TOTAL	3,952,485	692,746	5.71	74	1.00
WYOMING	(No Cities Over 50,000)				
STATE TOTAL	330,066	78,089	4.23	95	1.00

Source: Columns 2, 3, and 5 derived from United States Census of Population, 1960 PC(1) 1C - 51C, Tables 72 and 73. Column 6 computed from Column 4, as explained in text.